

# Appendix

# A

## 2010 Implementation Plan

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## **Appendix A: 2010 Implementation Plan**

The 2010 Plan Update describes the Local Hazardous Waste Management Program's vision, mission and goals, and the types of services provided to residents and businesses. The Program expects to maintain that suite of services over the next five years. However, we will also make adjustments and adapt our work in response to changing conditions, evaluation studies, and lessons learned in doing that work. This Appendix describes the Program's 2010 work plan and budget.

### **A.1 Mission & Goals**

The Mission of our Program is “to protect and enhance public health and environmental quality throughout King County by reducing the threat posed by the production, use & storage and disposal of hazardous materials.” We develop our annual project work plans directly from those three mission focus areas. In addition to the mission statement, the Program has developed goals and objectives that help refine and focus our work. The Program's vision, goals and objectives are listed in their entirety in the Plan Update.

### **A.2 Organization of the Program's Work**

The Program is organized under the three mission focus areas of:

1. Production & Upstream - production and upstream preventative work which focuses on the reduction or elimination of hazardous materials, chemicals and components in products;
2. Use & Storage - reducing the use of hazardous chemicals, materials and products; and if used, to ensure that they are used and stored properly; and
3. Collection & Disposal - collection and proper ultimate disposal of hazardous chemicals, materials and products.

Those three areas of work are described in more detail, along with their assigned budget amounts and FTE levels in the following sections.

### A.2.1 Budget & Staffing

The following table lists the Program's 2010 total approved budget and number of authorized FTEs by Program partner.

Program Partner	FTEs Budgeted in 2010	Total 2010 Budget Amount
King County Solid Waste Division (KCSWD)	8.0	\$3,512,294
King County Water and Land Resources Division (KCWLDRD)	28.67	\$4,709,255
Public Health – Seattle & King County (PH)	18.17	\$ 3,177,302
Seattle Public Utilities (SPU)	11.45	\$2,402,629
Suburban Cities	N/A	\$440,920
Local Hazardous Waste Fund/Other	N/A	\$50,730
<b>Program Total</b>	<b>66.29</b>	<b>\$14,293,130</b>

The following table delineates our 2010 total approved budget amount, number of authorized FTEs and those FTEs and amounts allocated to our three mission focus areas.

Mission Focus Area	FTEs Budgeted in 2010	Total 2010 Budget Amount	Proportion of Total 2010 Budget
Product & Upstream	1.65	\$298,273	2%
Use & Storage	34.82	\$5,743,231	40%
Collection & Disposal	29.82	\$8,251,626	58%
<b>Program Total</b>	<b>66.29</b>	<b>\$14,293,130</b>	<b>100%</b>

The following sections describe the work that will be done in each area. It should be noted that several projects contribute to more than one mission focus area.

### A.2.2 Production & Upstream

The mission focus area of production and upstream work makes up about 2% of the Program's 2010 annual budget, or approximately \$300,000. It concentrates on the production stage and upstream preventative work to reduce or eliminate hazardous materials, chemicals and components in products. The projects in 2010 that implement this area of work include policy development, work on the priority chemicals and product stewardship efforts.

Mission Focus Area	Total FTEs Budgeted	Total Budget Amount	Proportion of Total Budget
<b>Production &amp; Upstream Program Total</b>	<b>1.65</b>	<b>\$298,273</b>	<b>2%</b>

The Policy Development project is split between the mission focus areas of production/upstream and collection/disposal because of its targeted impacts. In the production/upstream area, it hopes to encourage product redesign through its work on take-it-back programs. But its primary focus for 2010 is to promote mandatory pharmaceuticals and mercury containing lighting take-back legislation at the state level. Personnel from KCWLRD staff this project.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Policy Development	0.50	\$54,645

The Priority Chemicals project is split amongst all three mission focus areas. In the production/upstream area staff will work to support the legislative effort to mandate take-it-back networks for mercury containing lighting, thermostats and thermometers. Personnel from KCWLRD and KCSWD staff this project.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Priority Chemicals	0.45	\$95,013

The Product Stewardship project is split between the mission focus areas of production/upstream and collection/disposal. In the production/upstream area, work in this area attempts to shift the burden for end-of-life product management away from local government and back to those who make and sell the products, as well as to promote less-toxic ingredients through product redesign. In 2010 the Product Stewardship project will focus on supporting the Policy Development project with their legislative efforts at the state level to mandate product stewardship for pharmaceuticals and mercury containing bulbs and linear tubes. They will also work with the Northwest Product Stewardship Council and the Product Stewardship Institute on other products and the manufacturers of those products to advance the product stewardship concept. Personnel from KCWLRD, KCSWD and SPU staff this project.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Product Stewardship	0.30	\$47,509

Administration, Cross-Program Services and Overhead is split proportionally amongst all three mission focus areas. It directly supports, and makes possible, the projects described above. These activities include administration and management, planning, fund administration, evaluation and reporting, suburban city program support, direct and indirect overhead, communications and web site support, data management, research services, and environmental justice and equitable service allocation. Personnel from all of our Program Partner agencies (KCSWD, KCWLRD, PH and SPU) staff this effort.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Administration, Cross-Program Services and Overhead for the Production & Upstream efforts	0.40	\$101,107

### A.2.3 Use & Storage

The mission focus area of use & storage works to reduce the use of hazardous chemicals, materials and products; and if used, to ensure that they are used and stored properly. Work in this area makes up about 40% of the Program's 2010 annual budget, or approximately \$5.77 million dollars. The projects in 2010 that implement this area of work include art chemical hazards, chemical sustainability (industrial materials exchange/industrial ecology, toxic use reduction and environmentally preferred purchasing), customer services lines HHW & SQG, environmental quality team, (EQT), healthy schools, incentives (EnviroStars and vouchers), interagency resource for achieving cooperation (IRAC), low income government housing, pesticide use reduction, priority chemicals, select business services (janitorial and landscapers), nail salons, and young children.

Mission Focus Area	Total FTEs Budgeted	Total Budget Amount	Proportion of Total Budget
<b>Use &amp; Storage Program Total</b>	<b>34.82</b>	<b>\$5,743,231</b>	<b>40%</b>

The Art Chemicals Hazards project will continue its focus on hazardous chemicals in products used in the arts, including photography, sculpting, painting, glass working, metalworking, ceramics, multimedia fine arts, theater stage crafts and design. Staff have partnered with the Pratt Art Institute to provide informational seminars throughout 2010 to educate artists about hazards in the materials that they use. Personnel from KCWLRD staff this project.

Project Name	FTEs Budgeted	Budget Amount
Art Chemical Hazards	0.75	\$96,969

The Chemical Sustainability project will focus on monitoring federal legislation related to TSCA reauthorization or related efforts in support to the policy development project. Other work in this project will consist of the researching of economic policies that might be used to advance the program’s toxic use reduction goals. Additionally, the development of a hazardous materials storage and flow database is anticipated and will be piloted in partnership with the Seattle Fire Department. Finally, staff will continue their work with the Industrial Materials Exchange program, Industrial Ecology and Toxic Use Reduction efforts. Personnel from PH staff this project.

➤ Industrial Materials Exchange/Industrial Ecology

The Industrial Materials Exchange program (IMEX) brings together industrial manufacturers to allow exchanges of materials that one manufacturer might have too much of or does not need anymore, to swap for materials that another manufacturer has and wants to exchange for the first manufacturer's goods through a passive on-line web database.

➤ Toxic Use Reduction

Staff will partner with the University of Washington to further the creation of an academic-based sustainable design center that provides toxic use reduction and safer alternatives research services to businesses and policy makers. This work will consist of working on a seminar series and course work that addresses chemical policy reform and green chemistry.

➤ Environmentally Preferred Purchasing

This effort will work with owners of janitorial business in coordination with the select business outreach – janitorial project. It will develop and provide a contract template as

well as procurement training to janitorial business owners focused on using less hazardous cleaning products.

Project Name	FTEs Budgeted	Budget Amount
Chemical Sustainability	2.35	\$318,598

HHW & SQG Customer Service lines are a primary service for the public and businesses. They provide a direct communication link with our staff and information to the general public and businesses about hazardous wastes and toxics. This service is staffed during regular business hours to address inquires about household and business hazardous substances and wastes. Staff also responds to HHW & SQG email information requests and to complaints, and can dispatch inspectors and/or technical assistance to businesses. Personnel from PH staff this project.

Project Name	FTEs Budgeted	Budget Amount
Customer Services Lines HHW & SQG	2.25	\$188,625

The Environmental Quality Team (EQT) will continue to address three environmental priority areas: flood hazard zones, areas served by on-site sewage systems and wellhead/groundwater protection areas. These efforts provide continuing education and technical assistance work to businesses in areas considered at relatively higher risk from improper management of hazardous materials. The core work of this team includes business outreach and assistance, and complaint response. Specifically in 2010, the EQT staff will conduct presentations about EQT services to suburban city environmental code enforcement agencies and business associations. They will provide field support to the EnviroStars project. And they will provide field support to the Healthy School's project staff as they make inspections. With regard to direct support to suburban cities, EQT staff will provide field support to the City of Redmond's wellhead protection program. It will also provide field support to the City of Kirkland's storm water program, which will focus on chemical contamination of ground water from dry cleaning chemicals. They will continue to work with Environmental Health Unit - Haz Mat Task Force on the efforts to address potential flooding from the Howard Hanson Dam. Personnel from KCWLRD and PH staff EQT.

Project Name	FTEs Budgeted	Budget Amount
Environmental Quality Team (EQT)	7.25	\$854,766

The Healthy Schools Project will continue to address a broad variety of toxic and hazardous materials that might be found in public and private schools throughout King County, as well as teacher training and direct student lessons on request. Specifically, in 2010, this project will focus on lead in art materials, mercury in thermostats, and hazardous chemicals in school labs. Staff will inspect schools and provide training to teachers. The project will provide information about our disposal services as well as offer funding through vouchers to help schools address improper storage of hazardous chemicals. Project staff will work at the state level to achieve Program proposed restrictions on chemical acquisitions by schools in the State’s K-12 Health and Safety Guide. Project staff will also offer support to school officials in seeking pesticide free food in their on premises food services for children. This project is staffed by personnel from KCWLRD and KCSWD.

Project Name	FTEs Budgeted	Budget Amount
Healthy Schools	1.56	\$283,117

EnviroStars continues as a recognition program for businesses that maintain environmentally sustainable practices according to a tiered rating system. In 2010, the project will work on updating their renewal database and disseminating that information to EQT and other Program field staff. Those field staff will conduct renewal reviews as needed. Additional businesses will be recruited into the EnviroStars program. This project is staffed by personnel from KCWLRD.

Project Name	FTEs Budgeted	Budget Amount
EnviroStars	1.25	\$204,695

Vouchers will provide up to \$500 to businesses to help them take tangible steps towards reducing toxic chemicals/hazardous materials use in their business and manufacturing processes. We will also continue our issuance of vouchers through staff from outside the program. Additional emphasis will be placed on having field staff and other appropriate Program staff issue vouchers to their targeted businesses. This project is staffed by personnel from KCWLRD.

Project Name	FTEs Budgeted	Budget Amount
Vouchers	0.75	\$214,742



Interagency Resource for Achieving Cooperation (IRAC) is an intergovernmental forum that will continue to provide a place for inspectors from multiple jurisdictions to address a variety of environmental problems collectively. Program staff emphasis will be placed on hazardous waste and toxic materials issues. Staff will host existing and new workgroups in 2010. They will continue to conduct interagency inspector trainings. Personnel from KCWLRD staff this project.

Project Name	FTEs Budgeted	Budget Amount
Interagency Resource for Achieving Cooperation (IRAC)	1.65	\$201,689

The Low Income Government Housing project is part of a larger objective to improve services to vulnerable and historically underserved populations, which are often residents of these housing complexes. We will continue to focus on Integrated Pest Management training to housing staff, residents and to determine other training needs that address hazardous household products and toxic materials with as many housing authorities as possible. Personnel from KCWLRD and PH staff this project.

Project Name	FTEs Budgeted	Budget Amount
Low Income Government Housing	0.50	\$65,978

The Nail Salons project is one in a suite of projects that targets vulnerable and/or underserved populations. It is currently focusing on the Vietnamese community of salon owners and workers. We are targeting BMPs in the area of chemicals usage, such as hazardous solvents and polishes, as well as ventilation to reduce inhalation dangers. In 2010 staff will continue to train workers, business owners and the public about the hazards associated with nail work and associated materials. They will work with the State Dept. of Licensing on BMPs, and educational materials, work with businesses to access our Program's incentives, and will support new technology to reduce solvent exposure. Personnel from KCWLRD and PH staff this project.

Project Name	FTEs Budgeted	Budget Amount
Nail Salons	1.00	\$115,304

The Pesticide Use Reduction project will continue to focus on pesticide reduction and covers a range of activities from internal Integrated Pest Management (IPM) promotion within King County, the City of Seattle, Suburban Cities, school districts and other public entities such as the Port of Seattle. It will provide IPM information and training about natural yard care to private landscape businesses, nurseries, and large landowners such as Seattle University. Finally, it will

support general public education about IPM and provide technical assistance regarding IPM methods through The Garden Hotline, a phone line that is operated by Seattle Tilth. All of these efforts will try to raise awareness and reduce the use of pesticides for aesthetic purposes. This project is staffed by personnel from KCWLRD and SPU.

Project Name	FTEs Budgeted	Budget Amount
Pesticide Use Reduction	1.65	\$420,842

The Priority Chemicals project is split amongst all three mission focus areas. In the use & storage area staff will focus on analyzing and providing information about select high-risk chemicals, such as bisphenol-A, phthalates, PBDEs, art hazards, chlorinated solvents and butoxyethanol cleaners. Staff will also address the problem of mercury containing antiques through the development and dissemination of best management practices (BMPs). Personnel from KCWLRD and KCSWD staff this project.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Priority Chemicals	0.45	\$95,013

The Select Business Services project encompasses outreach to business owners and workers that make up traditionally underserved portions of the population.

➤ Janitorial

This work focuses on the various underserved populations that make up the ranks of Janitorial workers. It endeavors to identify potential work place hazards, including the use of hazardous cleaners and solvents. It develops and provides best management practices (BMPs) to help reduce their exposure to and generation of hazardous wastes. In 2010 this project will continue to provide training through seminars to workers and business owners, and educational materials, in appropriate languages and through culturally relevant means.

➤ Landscaping

Similarly, this project focuses on the various underserved populations that make up workers in landscaping businesses. It focuses on potential work place hazards, including the use of hazardous pesticides and herbicides. It develops and provides best management practices (BMPs) to help reduce their exposure to and generation of hazardous wastes. Also, similarly, in 2010 this project will continue to provide training

through seminars to workers and business owners, and educational materials, in appropriate languages and through culturally relevant means.

Project Name	FTEs Budgeted	Budget Amount
Select Business Services	1.65	\$204,293

The Young Children project includes addressing a variety of hazardous and toxic materials and products that impact young children either through direct exposure or through their environment. In 2010, the project will focus on lead exposures through paint and candy; environmental exposures at child care facilities; and education of parents, and women of childbearing age. These efforts will be accomplished through targeted educational efforts, facility site visits and individual case follow-ups. The project has formed partnerships with a variety of agencies where there are overlaps of concern or jurisdiction, to increase the impact of their efforts. Personnel from KCWLRD and PH staff this project.

Project Name	FTEs Budgeted	Budget Amount
Young Children	4.12	\$531,788

Administration, Cross-Program Services and Overhead is split proportionally amongst all three mission focus areas. It directly supports, and makes possible, the projects described above. These activities include administration and management, planning, fund administration, evaluation and reporting, suburban city program support, direct and indirect overhead, communications and web site support, data management, research services, and environmental justice and equitable service allocation. Personnel from all of our Program Partner agencies (KCSWD, KCWLRD, PH and SPU) staff this effort.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Administration, Cross-Program Services and Overhead for Use & Storage efforts	7.64	\$1,946,813

**A.2.4 Collection & Disposal:**

Ensuring the proper disposal of toxics and hazardous wastes makes up almost 58% of our Program's 2010 annual budget, or approximately \$8.2 million dollars. These efforts include collection of household hazardous wastes and small quantities of business/institutional (SQG) waste at three fixed facilities and a Wastemobile that is set up at various sites throughout King County. It also includes sponsorship of suburban city collection events and work to promote

product stewardship efforts through private sector take-back programs. Current product stewardship efforts focus on pharmaceuticals, mercury in thermostats, and compact fluorescent bulbs and linear tubes. Lastly, there are some efforts undertaken in this focus area by the Policy project, the Priority Chemicals (mercury) project, and enforcement and compliance through the Interagency Compliance Team (ICT).

Mission Focus Area	Total FTEs Budgeted	Total Budget Amount	Proportion of Total Budget
<b>Collection &amp; Disposal Program Total</b>	<b>29.82</b>	<b>\$8,251,626</b>	<b>58%</b>

HHW collection is one of the primary services that the program offers. It is offered at one fixed facility in North Seattle and one fixed facility in South Seattle (both operated by Seattle Public Utilities), one fixed facility in Factoria, and a portable Wastemobile that is posted throughout King County and regularly at the Auburn SuperMall (both the Factoria facility and the Wastemobile are operated by King County Solid Waste Division.) Eligible businesses and other small quantity generators may use these services during the SQG Pilot Project described below. This project is staffed by personnel from KCSWD and SPU, and coordinates closely with PH regarding messaging on the Customer Service Lines.

Project Name	FTEs Budgeted	Budget Amount
HHW (Household)	14.10	\$4,098,983
Collection Facility Capital costs		\$40,000

Our Interagency Compliance Team (ICT) will continue to facilitate multi-agency efforts to bring historically recalcitrant businesses into compliance with environmental and health codes, rules and regulations. In 2010, several ongoing site enforcement and cleanup actions will continue, as well as the addition of new sites, as they are identified by our various partner agencies.

Personnel from KCWLRD staff this project.

Project Name	FTEs Budgeted	Budget Amount
Interagency Compliance Team (ICT) & Clean up Fund	0.75	\$118,960

Our Pharmaceuticals (PH:ARM) project will continue in 2010 to work with pharmacies and many other partners to develop a take-back system for unused and unneeded drugs, to keep them out of our landfills, sewers, and ground and surface waters. This includes significant efforts at

the State Legislature to pass take-back legislation. Personnel from KCWLRD and PH staff this project.

Project Name	FTEs Budgeted	Budget Amount
Pharmaceuticals	2.00	\$236,552

The Policy Development project works to develop policy positions for the program, and help implement them through legislative efforts, and working with other agencies and groups. In 2010, we will continue to focus on the pharmaceuticals and mercury containing lighting take-back programs to address the end-of-life stage for these materials, and to try to keep them out of our landfills and sewers, and our ground and surface waters. Personnel from KCWLRD staff this project.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Policy Development	0.50	\$54,645

The Priority Chemicals project is split amongst all three mission focus areas. In the collection/disposal area, this project provides technical support for mercury containing lighting and thermostat take-it-back programs. It supports addressing mercury in antiques. And it provides information through the EQT and other field and communication efforts. This project is staffed by personnel from KCWLRD and PH.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Priority Chemicals	0.45	\$95,013

The Product Stewardship project is split between the mission focus areas of production/upstream and collection/disposal. In the collection/disposal area, this project works to shift the burden for end-of-life product management away from local government and back to those who make and sell the products. It strategically supports other select projects such as mercury thermostat and thermometer, pharmaceutical, paint and mercury containing lighting take-back programs through direct support as well as educating about the concept of product stewardship. Personnel from KCWLRD, KCSWD and SPU staff this project.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Product Stewardship	0.30	\$47,509

The Small Quantity Generator (SQG) Disposal project allows businesses and institutions that generate small quantities of hazardous wastes, of similar types and quantities as HHW, to dispose of it at our household hazardous waste collection facilities. It is primarily targeting very small quantity generators that are too small to be served economically by commercial collectors. This pilot service will be continued throughout 2010. We will evaluate the feasibility of charging for this service in 2010. We will also advertise the service more broadly to elicit more participation. Personnel from KCSWD, KCWLRD and SPU staff this project.

Project Name	FTEs Budgeted	Budget Amount
SQG (Business) Disposal	0.85	\$305,260

Through Suburban City Collection Events, we issue contracts to 36 cities in King County to support each City's sponsorship of their own hazardous waste collection and/or education event. Often the City uses our funds to support their collection of hazardous waste at their city event that collects and disposes of other items funded by other sources. Personnel from PH administer the contracts with, and disburse the funds to, participating cities.

Project Name	Budget Amount
Suburban Cities Collection Events	\$457,609

Administration, Cross-Program Services and Overhead is split proportionally amongst all three mission focus areas. They directly support, and make possible, the projects described above. These activities include administration and management, planning, fund administration, evaluation and reporting, suburban city program support, direct and indirect overhead, communications and web site support, data management, research services, and environmental justice and equitable service allocation. Personnel from all of our Program Partner agencies (KCSWD, KCWLRD, PH and SPU) staff this effort.

Project Name	Proportional FTEs Budgeted	Proportional Budget Amount
Administration, Cross-Program Services and Overhead for Collection & Disposal	10.88	\$2,797,096

### **A.2.5 Administration, Cross-Program Services and Overhead**

In this section all of the administrative, cross-program services and overhead are described in detail, starting with Administration. Administration addresses the overall planning, management of program staff and cross-program functions, stewardship of the fund, suburban cities

coordination, evaluation of our efforts and reporting functions of the program. Administration will also coordinate the cross-program functions listed below.

Project Name	FTEs Budgeted	Total Budget Amount
Administration & Core Team	11.92	\$1,465,906

The Communications effort for this year will continue to support individual projects with communications and messaging development; the plan update and fee proposal efforts; and will work on strategic communications and messaging for our Program as a whole. Personnel from KCWLRD and KCSWD staff this project.

Project Name	Total FTEs Budgeted	Total Budget Amount
Communications	1.15	\$335,395

Our Web Site efforts are intimately tied to our communication project, however are budgeted separately. For 2010, we are anticipating the launch of our brand new Program web site in the early part of the year. Additions will also be made to the basic launch throughout the year, as well as updates as information is improved. We will also be exploring various new social media this year to gauge its efficacy in getting our information more broadly disseminated and our services more widely advertised. Personnel from KCWLRD staff this project.

Project Name	Total FTEs Budgeted	Total Budget Amount
Communications – Web Site	0.60	\$107,880

The Data Management project will continue to support all aspects of data base development in direct support to our project teams, as well as supporting and expanding the usability of our new web site. This effort also supports program wide data management and underpins evaluation and reporting about our work. Personnel from KCWLRD staff this project.

Project Name	Total FTEs Budgeted	Total Budget Amount
Data Management	1.90	\$255,855

The Environmental Justice Network in Action (EJNA) project provides a lead effort in addressing historically underserved populations. Those populations include ESL, non-English speaking and minority cultural groups. In 2010, EJNA will focus on training Program staff, working with administration and communications staff on our strategic communications effort, and exploring co-delivery of our services with community based organizations. Personnel from SPU staff this project.

Project Name	Total FTEs Budgeted	Total Budget Amount
Environmental Justice in Action (EJNA)	0.60	\$186,740

Overhead consists of all charges that cannot easily be directly attributed to the Program. It is often disaggregated into direct and indirect overhead. While the definitions of direct and indirect overhead vary amongst agencies, direct overhead can be thought of as those support services that are intermediate to the project staff. They might include such things as pooled administrative services, intermediate agency management, vehicle costs, equipment and general supplies. Indirect overhead might be thought of as the highest levels of support to project staff that might include higher levels of agency management, agency operating costs and other broad support services. Overhead costs are charged by all four of our implementing Program Partner agencies.

Item Name	Total Budget Amount
Direct Project Overhead	\$592,646
Indirect Project Overhead	\$1,503,793

The Research Services project will continue to support our strategic planning and our current project efforts. In 2010, the Research Team will review alternatives to various hazardous materials and products, research isocyanates and solvents in autobody shops, support the pesticide team to reduce or eliminate the aesthetic use of pesticides, and support the medicine return legislative effort. They will support project teams with research training, reviewing research proposals and reports for scientific validity, and undertaking some research for project teams. Lastly, they will directly support Program management by identifying relevant emerging issues. Personnel from KCWLRD and PH staff this project.

Project Name	Total FTEs Budgeted	Total Budget Amount
Research Services	2.75	\$396,801



# Appendix

## B

### Data and Additional Information regarding Hazardous Waste in King County

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## Appendix B: King County’s Hazardous Waste Profile

Appendix B contains additional information about hazardous waste generators, transporters and facilities in King county. It also contains information about used oil recyclers and known and suspected contaminated sites. This appendix contains the following lists:

- **Hazardous Waste Generators in King County**.....page B-3  
Data provided by Washington Department of Ecology.
- **Hazardous Waste Transporters Reported Used by King County Generators**.....page B-31  
Data provided by Washington Department of Ecology.
- **Washington State Hazardous Waste Transporters**.....page B-37  
Data provided by Washington Department of Ecology.
- **Additional Information about Hazardous Waste and Used Oil Facilities in King County**.....page B-43  
Data provided by Washington Department of Ecology.
- **Toxics Cleanup Program, Hazardous Site List**..... page B-45  
Data compiled from Ecology’s Hazardous Sites List:  
[http://www.ecy.wa.gov/programs/tcp/mtca\\_gen/hazsites.html](http://www.ecy.wa.gov/programs/tcp/mtca_gen/hazsites.html)
- **Contaminated Sites in King County**.....page B-47

Data was obtained from the Washington Department of Ecology. Ecology maintains several different lists of contaminated sites. For additional information see the Toxic Cleanup Program’s Web site:

<http://www.ecy.wa.gov/programs/tcp/sites/SiteLists.htm>

For additional information about these topics contact

Waste 2 Resources Program  
Northwest Regional Office  
Washington Department of Ecology  
3190 – 160<sup>th</sup> Ave. SE  
Bellevue, WA 98008-5452

**Information and receptionist:**  
425-649-7000

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**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B		C		D		E		F		H		I	
1	NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID	Total Number of LQGs								
2	Aero Controls Inc 20th St NW	AUBURN	KING	LQG	WAH000015107	112657	AUBURN	12							
3	BNSF Railway Company A Street	Auburn	KING	LQG	WAH000030248	108976	BELLEVUE	8							
4	Boeing Company Auburn	AUBURN	KING	LQG	WAD041337130	109613	BOTHELL	2							
5	Fluid Marine LLC	AUBURN	KING	LQG	WAD981764426	109953	CARNATION	1							
6	FUJIFILM Graphic Systems USA Inc	Auburn	KING	LQG	WAH000034258	110319	DES MOINES	2							
7	Mohawk Northern Plastics Inc	AUBURN	KING	LQG	WAD057313033	110581	FALL CITY (UJC)	1							
8	Numatic Finishing	AUBURN	KING	LQG	WAD052586542	110741	FEDERAL WAY	5							
9	Scott Coatings LLC	Auburn	KING	LQG	WAH000033562	110959	ISSAQUAH	2							
10	Shell Oil Product US SAP 121097	Auburn	KING	LQG	WAD988503124	111159	KENT	27							
11	Shell Station 120654	AUBURN	KING	LQG	WAD988503249	111252	KIRKLAND	8							
12	Shell Station 120849	AUBURN	KING	LQG	WAD165554692	112406	MAPLE VALLEY	1							
13	Skills Inc	AUBURN	KING	LQG	WAH000007724	112452	NORMANDY PARK	1							
14	Bellevue Towers	Bellevue	KING	LQG	WAH0000033800	105710	NORTH BEND	1							
15	Boeing Company Bellevue	BELLEVUE	KING	LQG	WAD980981567	109879	REDMOND	17							
16	Circuit Services World Wide LLC	BELLEVUE	KING	LQG	WAD089343354	109990	RENTON	12							
17	EV II LLC	BELLEVUE	KING	LQG	WAH000034244	109545	SEATAC	1							
18	Shell 120728	BELLEVUE	KING	LQG	WAD988503157	111870	SEATTLE	103							
19	Shell Station 120546	BELLEVUE	KING	LQG	WAD982652547	111222	SKYKOMISH	1							
20	Shell Station 121106	BELLEVUE	KING	LQG	WAD988466082	112384	TUKWILA	6							
21	WA DOT former Paragon Hotel	Bellevue	KING	LQG	WAH000032707	112496	WOODINVILLE	3							
22	Blue Heron Biotechnology Inc	Bothell	KING	LQG	WAH000026812	112992	<b>Total</b>	<b>214</b>							
23	TestAmerica Analytical Testing Corporation	BOTHELL	KING	LQG	WAH000011874	112760									
24	Shell Station 121719	CARNATION	KING	LQG	WAD988504114	108458									
25	Shell 120943	DES MOINES	KING	LQG	WAD982652554	112653									
26	Shell Station 121771	DES MOINES	KING	LQG	WAD988505582	111239									
27	WA AGR King 5	Fall City	KING	LQG	WAH000033230	112656									
28	Chevron 200028	FEDERAL WAY	KING	LQG	WAD988486312	110225									
29	Metso Paper USA	FEDERAL WAY	KING	LQG	WAD075204164	109478									
30	Shell Oil Products US SAP 121050	Federal Way	KING	LQG	WAD988502845	110377									
31	ST Fabrication Inc	Federal Way	KING	LQG	WAD009241324	110479									
32	Weyerhaeuser Technology Center	FEDERAL WAY	KING	LQG	WAD980738033	112207									
33	Issaquah High School	ISSAQUAH	KING	LQG	WA0000100313	105379									
34	Shell Station 120726	ISSAQUAH	KING	LQG	WAD988504148	112368									
35	All American Metal Finishing Kent	Kent	KING	LQG	WAH000025753	112447									
36	Associated Machine & Fabrication	KENT	KING	LQG	WAD180158206	108701									
37	Blue Origin LLC Kent	Kent	KING	LQG	WAH000030210	113306									
38	Boeing A&M Space Center	KENT	KING	LQG	WAD061670766	108942									
39	CNC Diversified Mfg Inc	Kent	KING	LQG	WAH000029413	109807									

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B		C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID				
40	Davis Wire Corp	KING	LQG	WAD051247716	110210				
41	Electrofinishing Inc Kent	KING	LQG	WAD988480687	110642				
42	Exotic Metals Forming Company	KING	LQG	WAD980980577	111869				
43	Fluid Motion LLC	KING	LQG	WAH000033440	111673				
44	Foamex LP	KING	LQG	WAD980723183	111230				
45	GKN Aerospace Chem tronics Inc	KING	LQG	WAD980988018	111257				
46	Hexcel Corp Structures	KING	LQG	WAD045256971	111330				
47	HYTEK FINISHES CO KENT	KING	LQG	WAD988466900	111418				
48	Kelly Moore Paint Co Inc Kent	KING	LQG	WAH000029611	111496				
49	Laboratory Corporation of America	KING	LQG	WAH000032985	111320				
50	Long Painting Co Kent	KING	LQG	WAH000019091	111625				
51	Mikron Industries	KING	LQG	WAD988510350	112160				
52	North Pacific Industrial Coatings Kent	KING	LQG	WAH000031798	112016				
53	Pacific Propeller Intl LLC	KING	LQG	WAD002788412	112021				
54	Pliant Corp	KING	LQG	WAD980980429	111861				
55	Protective Coatings Inc	KING	LQG	WAD063341424	112331				
56	Quala Systems Inc	KING	LQG	WAD980724421	112728				
57	Stoller Metals Inc	KING	LQG	WAH000031306	113014				
58	TERMINAL SERVICE	KING	LQG	WAH000034836	113140				
59	Univar USA Inc Kent	KING	LQG	WAD067548966	97743				
60	Western Processing Trust Fund II	KING	LQG	WAH000001966	105019				
61	ZEP Inc	KING	LQG	WAH000026548	105797				
62	ARCO 4459	KIRKLAND	LQG	WAD988514717	106280				
63	Kirkland City Hall Annex Bldg	Kirkland	LQG	WAH000034395	110107				
64	Macro Technologies Inc 124th Ave	KIRKLAND	LQG	WAD052595196	110815				
65	Shell Oil Products US SAP 121193	Kirkland	LQG	WAD988503595	110839				
66	SHELL STATION 120565	KIRKLAND	LQG	WAD988502779	111083				
67	Shell Station 120628	KIRKLAND	LQG	WAH000006064	111100				
68	TOTEM LAKE CHEVRON 91144	KIRKLAND	LQG	WAD988489506	112267				
69	Western Pneumatic Tube Co LLC	Kirkland	LQG	WAD009251323	112388				
70	Shell Station 120891	MAPLE VALLEY	LQG	WAD980987986	112398				
71	Canyon Creek Cabinet Company	MONROE	LQG	WAH000004465	112486		In Snohomish County		
72	Harris Family LTD Strip Mall Vacant Land	Normandy Park	LQG	WAH000028116	111416				
73	King Cnty DOT Mount St Bridge	North Bend	LQG	WAH000033348	112886				
74	Aerojet General Corporation	REDMOND	LQG	WAH000019380	111603				
75	Argent Chemical Laboratories	REDMOND	LQG	WAD988468211	108556				
76	Bio Rad Laboratories Redmond	REDMOND	LQG	WAD988479663	108897				
77	Dunkin & Bush Inc	REDMOND	LQG	WAD051239226	109008				
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Businesses Generating Hazardous Waste in King County as of August 2009

	A		B	C	D	E	F	H	I
	NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
79	Genie Industries	REDMOND	KING	LQG	WAD980738041	109453			
80	Genie Industries Moose Werks	REDMOND	KING	LQG	WAD980981690	109531			
81	Genie Industries Scissors Div	REDMOND	KING	LQG	WAH000001628	109940			
82	Honeywell Intl Inc 36th St	REDMOND	KING	LQG	WAD009249392	109914			
83	IDD Aerospace Corp	REDMOND	KING	LQG	WAD097820732	110027			
84	OnSite Environmental Inc	REDMOND	KING	LQG	WAD980975114	110039			
85	PROCYTE CORPORATION	REDMOND	KING	LQG	WAH000034604	110071			
86	Proto Design Inc 65th St	REDMOND	KING	LQG	WAH000019455	110194			
87	Prototron Circuits Inc	REDMOND	KING	LQG	WAR000006262	111214			
88	Redmond City	Redmond	KING	LQG	WAD981764657	112113			
89	Skyline Cleaners Inc	Redmond	KING	LQG	WAH000032868	111995			
90	TTM Technologies Redmond Division	REDMOND	KING	LQG	WAD980978951	112758			
91	UPS Redmond	REDMOND	KING	LQG	WAD988486932	107866			
92	Aim Aviation	RENTON	KING	LQG	WAD060030657	108411			
93	Atco 6026	RENTON	KING	LQG	WAD988515243	108933			
94	Boeing A&M 41st St	RENTON	KING	LQG	WAH000014274	109801			
95	Boeing Longacres	Renton	KING	LQG	WAD988482097	110880			
96	Boeing Renton	RENTON	KING	LQG	WAD009262171	110971			
97	G & K Services	RENTON	KING	LQG	WAH000020396	111033			
98	Kelly Moore Paint Co Inc Renton	Renton	KING	LQG	WAH000029603	111876			
99	Kens Dry Cleaners	Renton	KING	LQG	WAH000032520	111270			
100	Kenworth Truck Co Renton	RENTON	KING	LQG	WAD988517934	111303			
101	King Cnty DOT Road Services Div	RENTON	KING	LQG	WAD047476882	111497			
102	North Pacific Ind Coatings	Renton	KING	LQG	WAD194613600	112236			
103	Olympic Pipe Line Co Renton Station	RENTON	KING	LQG	WAD000641753	112736			
104	Boeing Spares Distribution Center	SEATAC	KING	LQG	WAD988482527	109889			
105	Ace Galvanizing Inc 96TH	SEATTLE	KING	LQG	WAD009286881	109881			
106	Akzo Nobel Paints #765	Seattle	KING	LQG	WA0000097816	113238			
107	Alaska Airlines Seattle Hangar	SEATTLE	KING	LQG	WAD980975361	113299			
108	Alaska Marine Lines	SEATTLE	KING	LQG	WAD070973300	113305			
109	Alaskan Copper Works	SEATTLE	KING	LQG	WAD980738546	108823			
110	Aoki Property	Seattle	KING	LQG	WAH000030871	108825			
111	Art Brass Plating Inc Seattle	SEATTLE	KING	LQG	WAD981772957	108864			
112	Asko Processing Inc	SEATTLE	KING	LQG	WAD041920554	108968			
113	BALLARD LAUNDRY CENTER	SEATTLE	KING	LQG	WAH000034741	108986			
114	Bayer Healthcare Pharmaceuticals Seattle	Seattle	KING	LQG	WAH000018705	109101			
115	Boeing A&M Developmental Center	SEATTLE	KING	LQG	WAD093639946	109207			
116	Boeing North Boeing Field	SEATTLE	KING	LQG	WAD980982037	109246			
117									

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
118 Boeing Plant 2	SEATTLE	KING	LQG	WAD009256819	109391			
119 Boeing South Park	SEATTLE	KING	LQG	WAD980982672	109524			
120 Boeing Thompson	SEATTLE	KING	LQG	WAD980982912	109568			
121 BRE Properties Inc	Seattle	KING	LQG	WAH000029059	109667			
122 Cascade Columbia	SEATTLE	KING	LQG	WAD008957961	109676			
124 CellNetix Pathology and Laboratories	Seattle	KING	LQG	WAH000032314	109803			
125 Certified Carpets Inc Former	Seattle	KING	LQG	WAD988481024	109880			
126 Cherry Street Cleaners	Seattle	KING	LQG	WAD048686489	109883			
127 Coast Crane Company	Seattle	KING	LQG	WAR000069940	109929			
128 Coastal Transportation	Seattle	KING	LQG	WAH000032342	110186			
129 Delta Marine Industries Inc	SEATTLE	KING	LQG	WAD052593480	110290			
130 Dynacare Northwest Inc 17th Ave	Seattle	KING	LQG	WAH000025959	110408			
131 Dynacare NW Inc Rapid Response Lab	SEATTLE	KING	LQG	WAH000017285	110443			
132 Elliott Holding Company LLC	Seattle	KING	LQG	WAH000021328	110602			
133 Emerald Services Inc Airport Way	Seattle	KING	LQG	WAD058367152	110808			
134 Enterprises NW	Seattle	KING	LQG	WAD075745497	110828			
135 First West Investment Property LLC	Seattle	KING	LQG	WAH000030856	110901			
136 Former Basin Oil Co Inc Seattle	SEATTLE	KING	LQG	WAD988477501	110949			
137 Foss Maritime Co	SEATTLE	KING	LQG	WAD067172288	111015			
138 Fred Hutchinson Cancer Research Center	SEATTLE	KING	LQG	WAD988473641	111730			
139 Frontier Geosciences Inc	SEATTLE	KING	LQG	WAH000002048	111837			
140 Heavens Supply Company	Seattle	KING	LQG	WAH000033818	111924			
141 Immunex Corporation	Seattle	KING	LQG	WAH000023036	111051			
142 INDUSTRIAL BATTERY	SEATTLE	KING	LQG	WAH000034810	111185			
143 Industrial Plating Corp	SEATTLE	KING	LQG	WAD009491200	111665			
144 International Paint LLC	Seattle	KING	LQG	WAH000026949	110091			
145 Jorgensen Forge Corp	SEATTLE	KING	LQG	WAD000602813	111293			
146 Joshua Green Corp LLC	Seattle	KING	LQG	WAH000033526	111336			
147 K Sea Transportation LLC	Seattle	KING	LQG	WAD988466751	111347			
148 Kelly Moore Paint Airport Way	Seattle	KING	LQG	WAH000030464	111378			
149 Kelly Moore Paint Co	SEATTLE	KING	LQG	WAD059315069	111444			
150 Kelly Moore Paint Co Inc Seattle	Seattle	KING	LQG	WAH000029581	111447			
151 King Cnty DOT Metro Transit South Base	SEATTLE	KING	LQG	WAD980738983	111314			
152 Korry Electronics Seattle	SEATTLE	KING	LQG	WAD980977631	111511			
153 Magnetic & Penetrant Services Co Inc	SEATTLE	KING	LQG	WAD988482659	111517			
154 Mason Dixon Intermodal Inc	Seattle	KING	LQG	WAH000034528	111532			
155 Northland Services Inc	SEATTLE	KING	LQG	WAH000011486	111550			
156 Nucor Steel Seattle Inc	SEATTLE	KING	LQG	WAD988487583	111552			

Businesses Generating Hazardous Waste in King County as of August 2009

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
157	Pace Analytical Svcs	SEATTLE	KING	LQG	WAD027446608	111555		
158	Paine Electronic Mfg Facility	SEATTLE	KING	LQG	WAD009247495	112157		
159	Pepper Hill Shopping Ctr	Seattle	KING	LQG	WA0000101774	111967		
160	Polar Supply Co Inc Former	Seattle	KING	LQG	WAH000031146	112189		
161	Precision Engineering Inc	SEATTLE	KING	LQG	WAD041338252	112204		
162	Qwest Corporation W00946	SEATTLE	KING	LQG	WAD001958149	112261		
163	Rudd Co Inc	SEATTLE	KING	LQG	WAD047487103	112264		
164	Saint Gobain Containers Inc	SEATTLE	KING	LQG	WAD044589935	112269		
165	Saint Gobain Performance Plastics	SEATTLE	KING	LQG	WAD083348151	112270		
166	Saint Gobain Performance Plastics	SEATTLE	KING	LQG	WAH000013235	112272		
167	Seattle Cancer Care Alliance	SEATTLE	KING	LQG	WAD98097771	110140		
168	Seattle City ESD S Charles St	SEATTLE	KING	LQG	WAD980976252	111993		
169	Seattle City Parks & Rec Gas Works Park	SEATTLE	KING	LQG	WAH000019059	112003		
170	Seattle City Parks Westbridge Facility	Seattle	KING	LQG	WAH000033099	112004		
171	Seattle City SDOT Broad St	SEATTLE	KING	LQG	WAD988473336	112017		
172	Seattle Dye Works	SEATTLE	KING	LQG	WAR00005272	111853		
173	Seattle Parks Genesee Park Hq SE	SEATTLE	KING	LQG	WAD980980106	112303		
174	Seattle Port Seatac Intl Airport	SEATTLE	KING	LQG	WAD980982706	112327		
175	SEATTLE PORT TERMINAL 91	SEATTLE	KING	LQG	WAH000033486	112328		
176	Seattle School Dist 1 Van Asselt Element	Seattle	KING	LQG	WAH000034368	112450		
177	Second & Bell Building LLC	Seattle	KING	LQG	WAD981772551	112481		
178	Shell Oil Products US SAP 121038	Seattle	KING	LQG	WAD988503975	112490		
179	Shell Oil Products US SAP 121476	Seattle	KING	LQG	WAD988504049	112533		
180	Shell Oil Products US SAP 121585	Seattle	KING	LQG	WAD988466363	112547		
181	Shell Oil Products US SAP 121693	Seattle	KING	LQG	WAD988503637	112615		
182	SHELL STATION 120819	SEATTLE	KING	LQG	WAD988503611	112649		
183	Shell Station 120993	SEATTLE	KING	LQG	WAD988504098	112658		
184	Shell Station 121526	SEATTLE	KING	LQG	WAD988503652	112670		
185	Shell Station 121702	SEATTLE	KING	LQG	WAD988502407	112805		
186	Shell Station 121000	SEATTLE	KING	LQG	WAH000006551	112889		
187	Sherwin Williams Paint Co 6th Ave Seattl	SEATTLE	KING	LQG	WAH000013730	112972		
188	Sherwin Williams Store 4317	SEATTLE	KING	LQG	WAH000032743	113068		
189	Shortstop Cleaners	Seattle	KING	LQG	WAD980738926	113194		
190	Skills Inc Ballard Anodize	SEATTLE	KING	LQG	WAD988482030	109886		
191	Skills Inc Paint	SEATTLE	KING	LQG	WAH000032731	109888		
192	Smiths Auto Service former Vacant Land	Seattle	KING	LQG	WAH000034262	113228		
193	Superior Cleaners	Seattle	KING	LQG	WAH000034180	84213		
194	TOC Holdings Roosevelt Way	SEATTLE	KING	LQG	WAD009258468	84409		
195	Todd Shipyards	SEATTLE	KING	LQG				



**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B		C		D		E		F		H		I		
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID											
196	Total Reclaim Inc	SEATTLE	KING	LQG	WAD009482803	97911										
197	Trident Seafoods Corp Seattle	Seattle	KING	LQG	WAD063362370	102445										
198	TSA SeaTac Airport	Seattle	KING	LQG	WAH000023953	102690										
199	Union View LLC	Seattle	KING	LQG	WAH000029107	103024										
200	UPS Seattle Import	SEATTLE	KING	LQG	WAH000023426	103133										
201	US CG Integrated Support Command Seattle	SEATTLE	KING	LQG	WA6690331347	103289										
202	VA PSHCS Seattle Division	SEATTLE	KING	LQG	WA1360007313	105673										
203	VACANT PARCEL	SEATTLE	KING	LQG	WAR000001214	105674										
204	Valspar Corp	SEATTLE	KING	LQG	WAD012425385	105838										
205	Viox Corp	SEATTLE	KING	LQG	WAD053814091	106297										
206	WA AGR King 2	SEATTLE	KING	LQG	WAH000012765	107228										
207	WA DOT Alaskan Way Viaduct Project	SEATTLE	KING	LQG	WAH000018143	107348										
208	WA UW Harborview Medical Center	SEATTLE	KING	LQG	WAD096767967	107421										
209	WA UW Sandpoint	SEATTLE	KING	LQG	WAH000009118	107439										
210	WA UW Seattle Campus	SEATTLE	KING	LQG	WAD980738652	107474										
211	Burlington Northern & Santa Fe RR	SKYKOMISH	KING	LQG	WAD988483830	107528										
212	Analytical Resources Inc	TUKWILA	KING	LQG	WAD988491130	110675										
213	Bay Valve Service Inc Tukwila	Tukwila	KING	LQG	WAH000027067	108561										
214	Fatigue Technology FTI	TUKWILA	KING	LQG	WAH000015412	110109										
215	Gaco Western LLC	TUKWILA	KING	LQG	WAD009241027	110933										
216	George Heiser Body Co Inc Tukwila	TUKWILA	KING	LQG	WAH000018242	111806										
217	Westfield Southcenter	Tukwila	KING	LQG	WAR000003715	111328										
218	Bio Rad Laboratories Woodinville	WOODINVILLE	KING	LQG	WAH000007591	112671										
219	PRC DeSoto International ASC Seattle	WOODINVILLE	KING	LQG	WA00000866632	109202										
220	Universal Mfg Corp	WOODINVILLE	KING	LQG	WAD044038073	109976										
221																
222																
223	Aero Controls Inc Auburn	AUBURN	KING	MQG	WAD981772361	108508										
224	Aim Aviation Auburn Inc	AUBURN	KING	MQG	WA000026781	109577										
225	American Transportation Repair Inc	AUBURN	KING	MQG	WAD988513008	109698										
226	Arco 5660	AUBURN	KING	MQG	WAD988515169	110448										
227	Associated Machine & Fab Inc	Auburn	KING	MQG	WAH000032812	110756										
228	Burke Gibson Inc	AUBURN	KING	MQG	WAD000711911	110863										
229	Central Freight Lines Auburn	Auburn	KING	MQG	WAD130608516	111031										
230	CK Worldwide Inc	AUBURN	KING	MQG	WAD046691515	111835										
231	Safety Kleen Systems Inc Auburn 118101	AUBURN	KING	MQG	WAD000712059	112337										
232	Shell Oil Products US SAP 166443	Auburn	KING	MQG	WAH000032020	105724										
233	Wal Mart 2385	AUBURN	KING	MQG	WAR000005462	107748										
234	Arco 4358	BELLEVUE	KING	MQG	WAD988514683	108500										
											<b>Total Number of MQGs</b>					
												Summarized on Page 7				

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B		C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID	Total Number of MQGs			
235	Aurora Improvement Company	Bellevue	KING	MQG	WAH000031036	110384	AUBURN	11	
236	Bellevue Community College	BELLEVUE	KING	MQG	WAD089937353	110652	BELLEVUE	17	
238	Bellevue Square Managers BSM	BELLEVUE	KING	MQG	WAH000001057	110836	BOTHELL	10	
239	Bellevue Way Dry Cleaners	BELLEVUE	KING	MQG	WAD981772924	111709	BURIEN	1	
240	CCS Printing	Bellevue	KING	MQG	WAD058367350	111250	COVINGTON	3	
241	Chevron 92022	Bellevue	KING	MQG	WAD988489514	111256	DES MOINES	3	
242	Dermatopathology Northwest PLLC	Bellevue	KING	MQG	WAH000031066	112360	DUVALL	2	
243	Home Depot 4711	BELLEVUE	KING	MQG	WAH000012666	112399	ENUMCLAW	1	
244	King Cnty DOT Metro Transit East Base	BELLEVUE	KING	MQG	WAD981762149	112494	FEDERAL WAY	11	
245	Overlake Hospital Medical Center	BELLEVUE	KING	MQG	WAD076631704	112632	ISSAQUAH	6	
246	Public Storage SE 30th	Bellevue	KING	MQG	WAH000032994	113040	KENMORE	1	
247	Shell 120970	BELLEVUE	KING	MQG	WAD988505202	112028	KENT	26	
248	Shell Oil Product US SAP 121172	Bellevue	KING	MQG	WAD988510897	106286	KIRKLAND	9	
249	Shell Station 120465	BELLEVUE	KING	MQG	WAD988503223	107144	MERCER ISLAND	1	
250	Shell Station 120640	BELLEVUE	KING	MQG	WAD988503215	108074	REDMOND	12	
251	Shell Station 121025	BELLEVUE	KING	MQG	WAD988503207	108134	RENTON	15	
252	Acucela Inc	Bothell	KING	MQG	WAH000029740	109479	SEATAC	3	
253	Albany Molecular Research Inc Bothell Re	BOTHELL	KING	MQG	WAD988516712	110368	SEATTLE	123	
254	Bothell Service Center	BOTHELL	KING	MQG	WAD988511911	111056	SHORELINE	1	
255	Fluke Metal Products	BOTHELL	KING	MQG	WAD982820821	111134	SNOQUALMIE	2	
256	Home Depot 4712	BOTHELL	KING	MQG	WAR000009951	111231	TUKWILA	9	
257	Lumera Corp	BOTHELL	KING	MQG	WAH000013524	111264	VASHON ISLAND	1	
258	North Shore Sch Dist 417 Support Service	BOTHELL	KING	MQG	WAH000005587	112370	WOODINVILLE	5	
259	Shell 120932	BOTHELL	KING	MQG	WAD988503926	112968	<b>Total</b>	<b>273</b>	
260	Shell Oil Product US SAP 128023	Bothell	KING	MQG	WAH000028406	113042			
261	Shell Station 120531	BOTHELL	KING	MQG	WAD988502423	105623			
262	Highline Medical Center Main Campus	BURIEN	KING	MQG	WAD988514543	110340			
263	Covington MultiCare Clinic	Covington	KING	MQG	WAD988506267	110587			
264	Home Depot HD4737	Covington	KING	MQG	WAH000033044	111181			
265	Wal Mart Store 5073	Covington	KING	MQG	WAH000024709	113054			
266	Highline SD Mount Rainier High School	DES MOINES	KING	MQG	WAD988523049	111248			
267	Shell 120956	DES MOINES	KING	MQG	WAD988503918	111570			
268	Shell Oil Products US SAP 12770	Des Moines	KING	MQG	WAH000032772	112334			
269	American Water Services CDM	DUVALL	KING	MQG	WAH000013821	109116			
270	PENTZ DESIGN PATTERN & FOUNDRY IN	DUVALL	KING	MQG	WAH000034216	109426			
271	Helac Corp Battersby Ave	ENUMCLAW	KING	MQG	WAD988493573	108839			
272	Barkshire Panel Systems	Federal Way	KING	MQG	WAD988496162	109915			
273	Blackstones Collision Inc	FEDERAL WAY	KING	MQG	WAD095714697	109920			

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
274	Chevron USA Inc SS 98538	FEDERAL WAY	KING	MQG	WAD988486049	110745		
275	Eastman Kodak Co KD&D Federal Way	Federal Way	KING	MQG	WAH000034456	110809		
276	Fisher Scientific Co Federal Way	FEDERAL WAY	KING	MQG	WAD988495214	111251		
277	Home Depot 4703	FEDERAL WAY	KING	MQG	WAR000006197	112188		
278	Jet Chevrolet	FEDERAL WAY	KING	MQG	WAD981771892	112361		
279	Orion Industries	Federal Way	KING	MQG	WAH000031994	112402		
280	Shell Oil Product US SAP 121094	Federal Way	KING	MQG	WAD988478913	112442		
281	Shell Station 120698	FEDERAL WAY	KING	MQG	WAD988504437	99489		
282	Wal Mart 2571	FEDERAL WAY	KING	MQG	WAH000007799	107579		
283	Home Depot 4704	Issaquah	KING	MQG	WAH000024202	112410		
284	Providence Point Umbrella	Issaquah	KING	MQG	WAH000027773	112583		
285	Shell Station 120677	ISSAQUAH	KING	MQG	WAD988504122	112619		
286	Shell Station 121591	ISSAQUAH	KING	MQG	WAD988504064	112652		
287	Shell Station 121711	ISSAQUAH	KING	MQG	WAH000010371	113034		
288	Target Store 0996	Issaquah	KING	MQG	WAH000026725	113172		
289	Kenmore Air Harbor	KENMORE	KING	MQG	WAD002799187	112626		
290	Arco 5568	KENT	KING	MQG	WAD988515094	108566		
291	Arrow Disc	Kent	KING	MQG	WAH000031921	113285		
292	Clyde West Inc Kent	Kent	KING	MQG	WAD988483376	108892		
293	Diamond Prefinish Inc	KENT	KING	MQG	WAH000005348	109003		
294	Evergreen Engravers	KENT	KING	MQG	WA0000085183	109405		
295	Express Transport	Kent	KING	MQG	WAH000033749	109864		
296	Flow International Corp	KENT	KING	MQG	WAD988520334	110007		
297	General Parts Inc Carquest DC	Kent	KING	MQG	WAH000027315	110093		
298	HD Supply Construction Supply WC 0030	Kent	KING	MQG	WAD988495222	110341		
299	HD Supply Fac Maintenance Ltd DC009	Kent	KING	MQG	WAH000033933	110857		
300	Home Depot 4722	Kent	KING	MQG	WAH000012658	111923		
301	Hydraulic Repair & Design Inc	KENT	KING	MQG	WAD010211415	111229		
302	Interplastic Corporation Blend Plant	KENT	KING	MQG	WAD988509261	110089		
303	Pacific Aero Tech Inc	Kent	KING	MQG	WAH000032499	111693		
304	Polar Graphics	KENT	KING	MQG	WAD988521498	112010		
305	Protective Coatings Inc Composites Div	KENT	KING	MQG	WAH000014746	112340		
306	Riverside Collision Inc	KENT	KING	MQG	WAD980976021	112479		
307	ROTARY OFFSET PRESS	KENT	KING	MQG	WAR000000190	112577		
308	Shell 120930	KENT	KING	MQG	WAD988504015	112663		
309	Shell Station 120459	KENT	KING	MQG	WAD988504007	112677		
310	South Seattle Auto Auction Body & Paint	KENT	KING	MQG	WAD988471942	112941		
311	Sunset Press Inc	Kent	KING	MQG	WAH000025652	113215		
312								

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B		C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID				
313	Target Store 0681	Kent	MQG	WAH000026697	113229				
314	Texaco 63220307	KENT	MQG	WAD988489431	9905				
315	UPS Freight Kent	Kent	MQG	WAH000004036	103256				
316	US EPA Abandoned Gas Cylinder Site Kent	KENT	MQG	WAH000020230	104420				
317	Arco 6031	KIRKLAND	MQG	WAD988515250	108657				
318	Bakkers Fine Drycleaning Inc	KIRKLAND	MQG	WAD980987143	109251				
319	Kelly Moore Paint Kirkland	Kirkland	MQG	WAH000032250	110882				
320	Lake Washington School Dist Lake Wash HS	KIRKLAND	MQG	WAD100868439	112151				
321	Lake Washington Tech College Kirkland	KIRKLAND	MQG	WAD981772486	111945				
322	Shell Station 120477	KIRKLAND	MQG	WAD988503587	112364				
323	Shell Station 120609	KIRKLAND	MQG	WAD988503884	112393				
324	Sherwin Williams Co Store 8002	Kirkland	MQG	WAH000034028	112467				
325	Whitman Engines LLC	Kirkland	MQG	WAH000034199	112939				
326	Shell Oil Products US SAP 121058	Mercer Island	MQG	WAD988476636	112257				
327	Apex Painting Contractors Inc	REDMOND	MQG	WAH000018101	110238				
328	Arco 5920	REDMOND	MQG	WA0000816785	110271				
329	Aseblon Inc	Redmond	MQG	WAH000016113	110313				
330	Gent Industries Redmond	Redmond	MQG	WAH000032937	110873				
331	Gordon Trepus Painting Inc	REDMOND	MQG	WAH000003277	111908				
332	Group Health Cooperative	REDMOND	MQG	WAD982658700	111856				
333	Home Depot 4723	Redmond	MQG	WAH000024236	112367				
334	Queen City Auto Rebuild Inc	REDMOND	MQG	WAD982659591	112710				
335	Sato Corporation	REDMOND	MQG	WAD988483574	112985				
336	Shell Station 120525	REDMOND	MQG	WAD988503728	113189				
337	Spectra Lux Corp 134th Ct NE	REDMOND	MQG	WAH000020214	113223				
338	Stively Commercial Coatings	Redmond	MQG	WAH000029231	108273				
339	All Pak Container	Renton	MQG	WAH000029311	109850				
340	Arco 5362	RENTON	MQG	WAD988514881	110344				
341	ARCO 6530	RENTON	MQG	WAH000020206	110352				
342	CHEVRON 99114	RENTON	MQG	WAD060039930	110728				
343	Honeywell Inc	RENTON	MQG	WAD981774243	110768				
344	Issaquah School Dist Facility Services	Renton	MQG	WAH000028739	110790				
345	K/P Corporation	Renton	MQG	WAH000033963	110848				
346	King County South Treatment Plant	RENTON	MQG	WAD980975650	110891				
347	Renton City	Renton	MQG	WAH000023838	111148				
348	Renton City of 7th Place	Renton	MQG	WAH000029189	111225				
349	Shell 120781	RENTON	MQG	WAD988503553	112400				
350	Shell Station 120646	RENTON	MQG	WAD988503736	112499				
351									

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
352	Shell Station 121227	RENTON	KING	MQG	WAD988504023	112866		
353	Valley Medical Center Renton	RENTON	KING	MQG	WAD076634252	84795		
354	Wal Mart 2516	RENTON	KING	MQG	WAH000000026	108100		
355	Highline Auto Body Inc SeaTac	SEATAC	KING	MQG	WAH000025422	109120		
356	Highline School Dist Tyee High School	SEATAC	KING	MQG	WAD988523072	111888		
357	LIT Industrial Limited Partnership	SeaTac	KING	MQG	WAH000032458	104701		
358	2040 East Madison LLC	Seattle	KING	MQG	WAH000033602	108597		
359	Alaska Building Cushman & Wakefield	Seattle	KING	MQG	WAD982656902	108614		
360	Allen Institute for Brain Science	Seattle	KING	MQG	WAH000022600	108716		
361	Arco 0409	SEATTLE	KING	MQG	WAD988514584	113307		
362	Arco 5242	SEATTLE	KING	MQG	WAD980988521	108884		
363	Arco 5515	SEATTLE	KING	MQG	WAD988515037	108898		
364	Arco 6209	SEATTLE	KING	MQG	WAD988484960	109082		
365	Ash Grove Cement West Inc	SEATTLE	KING	MQG	WAD009249616	109086		
366	Auto Site Automotive	Seattle	KING	MQG	WAD988495172	109087		
367	Avtech Corp	SEATTLE	KING	MQG	WAD009273434	109102		
368	Bardahl	SEATTLE	KING	MQG	WAD009264649	109203		
369	Bio Rad Laboratories Seattle	SEATTLE	KING	MQG	WAD980987192	109449		
370	BMP Inc Airport Way	SEATTLE	KING	MQG	WAH000013771	109472		
371	BNSF Railway Company Seattle4	SEATTLE	KING	MQG	WAD980722821	109494		
372	BP West Coast Products	SEATTLE	KING	MQG	WAD009590779	109501		
373	Brooks Rand LLC	SEATTLE	KING	MQG	WAH000000281	109678		
374	Capital Industries Inc	SEATTLE	KING	MQG	WAD009245465	109851		
375	Cascade Designs Inc	Seattle	KING	MQG	WAH000030512	109859		
376	Chevron 90636	SEATTLE	KING	MQG	WAD982654006	109964		
377	CHEVRON NO 9 4411	SEATTLE	KING	MQG	WAD988485074	109967		
378	Chijako Restaurant	Seattle	KING	MQG	WAH000028755	109968		
379	ConocoPhillips 30109	SEATTLE	KING	MQG	WAD982652638	109986		
380	ConocoPhillips 30857	SEATTLE	KING	MQG	WAH000015289	109994		
381	Crowley Marine Services Pier 17	SEATTLE	KING	MQG	WAD008034191	109552		
382	Emerald Services Inc	SEATTLE	KING	MQG	WAD058364647	109553		
383	Estate of Franklin Mesher	Seattle	KING	MQG	WAH000025130	110162		
384	Flamespray Northwest Inc	Seattle	KING	MQG	WAH000033142	110213		
385	Gilead Sciences Inc	Seattle	KING	MQG	WAD980978936	110257		
386	GM Nameplate Inc Seattle	SEATTLE	KING	MQG	WAD009255423	110278		
387	Group Health Central Hospital	SEATTLE	KING	MQG	WAD980835037	110304		
388	Group Health Cooperative	SEATTLE	KING	MQG	WAD120591607	110338		
389	Gulassa & Co Inc	Seattle	KING	MQG	WAD988477279	110351		
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**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID			
391	Home Depot 4702	SEATTLE	KING	MQG	WAR00009977	110359		
392	HOME DEPOT 4706	SEATTLE	KING	MQG	WA0001006105	110398		
393	Home Depot 4707	Seattle	KING	MQG	WAD988498028	110414		
394	Home Depot 8944	SEATTLE	KING	MQG	WAH000020271	110415		
395	Horizon Air Seattle Maintenance	SEATTLE	KING	MQG	WAD982654667	110419		
396	HSD Evergreen High School	Seattle	KING	MQG	WAH000033767	110476		
397	Ikaria Inc	SEATTLE	KING	MQG	WAD000643080	110585		
398	Kinder Morgan Liquids Terminals LLC	SEATTLE	KING	MQG	WAD981763527	110586		
399	King Cnty Dept of Nat Resources Env Lab	SEATTLE	KING	MQG	WAD981767502	110592		
400	King Cnty DOT Metro Transit S Facilitie	SEATTLE	KING	MQG	WAD980983522	110641		
401	King Cnty DOT Metro Transit CB/AB/NRV	SEATTLE	KING	MQG	WAD988490991	110646		
402	King Cnty DOT Metro Transit North Base	SEATTLE	KING	MQG	WAD009258880	110730		
403	Lake Union Dry Dock Co	SEATTLE	KING	MQG	WAD980986525	110737		
404	Maaco Auto Painting & Body Works Centers	SEATTLE	KING	MQG	WAD075151662	110784		
405	Maaco Auto Painting Bodyworks	SEATTLE	KING	MQG	WAD000230508	110810		
406	McKinstry Co 220 Hudson	Seattle	KING	MQG	WAH000032921	110821		
407	Modumetal Inc	Seattle	KING	MQG	WAH000034442	110825		
408	Morgans Fine Finishes LLC	SEATTLE	KING	MQG	WAH000017699	110833		
409	Northwest Airlines	SEATTLE	KING	MQG	WAD078216165	110845		
410	Northwest Hospital	SEATTLE	KING	MQG	WAH00004549	110885		
411	NRC Environmental Sves Inc	SEATTLE	KING	MQG	WAD009271164	111011		
412	Olympic Foundry Inc	SEATTLE	KING	MQG	WAD049972102	111028		
413	Pacific Fishermen Shipyard & Electric LL	SEATTLE	KING	MQG	WAD002838068	111029		
414	Pacific Northwest Communities	SEATTLE	KING	MQG	WAR000008060	111799		
415	Pacific Northwest Research Foundation	SEATTLE	KING	MQG	WAR000008300	111836		
416	Phenopath Laboratories	SEATTLE	KING	MQG	WAH000020685	111900		
417	Pioneer Industries Seattle	Seattle	KING	MQG	WAD982657504	111259		
418	Progressive Fastening Inc	SEATTLE	KING	MQG	WAH000032052	111340		
419	Puget Sound Coatings Machinists Inc	SEATTLE	KING	MQG	WAD002838068	111354		
420	Puget Sound Institute of Pathology	SEATTLE	KING	MQG	WAH000003459	111365		
421	Queen Anne Painting Inc Latona	SEATTLE	KING	MQG	WAH000016311	111385		
422	Repair Technology Inc	Seattle	KING	MQG	WAH000001818	111391		
423	Rosetta Inpharmatics LLC	SEATTLE	KING	MQG	WAH000022664	111466		
424	SAK & ASSOC INC	Seattle	KING	MQG	WAH000032725	111515		
425	Sams Club 6687	Seattle	KING	MQG	WAH000000083	111567		
426	Seattle Biomedical Research Institute	Seattle	KING	MQG	WAH000022588	111580		
427	Seattle Childrens	SEATTLE	KING	MQG	WAD048682157	111580		
428	Seattle Childrens Hospital Research Inst	Seattle	KING	MQG	WAD048682157	111630		
429	Seattle City ESD Fire Sta 31	SEATTLE	KING	MQG	WAH000023218	111656		
430	Seattle City Light MRWF	SEATTLE	KING	MQG	WAD988498911	111978		
431	Seattle City Light MRWF	Seattle	KING	MQG	WAD980726384	112169		
432	Seattle Galv Inc	Seattle	KING	MQG	WAD009264730	112268		
433	Seattle Pacific University 339 W Bertona	Seattle	KING	MQG	WAH000022452	112275		
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**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
435	Seattle Port Fishermens Terminal	SEATTLE	KING	MQG	WAD980977284	112240		
436	Seattle Port PCS Airport	SEATTLE	KING	MQG	WAH000017301	112248		
437	Seattle Port Seaport Maintenance	SEATTLE	KING	MQG	WAD980978431	110122		
438	Seattle Port Shilshole Bay Marina	SEATTLE	KING	MQG	WAD981766447	110127		
439	Seattle Sch Dist 1 Hamilton Middle Sch	SEATTLE	KING	MQG	WAD100568682	110141		
440	Seattle School Dist 1 Sealth HS	SEATTLE	KING	MQG	WAD988490520	112304		
441	Seattle School Dist John Stanford Center	SEATTLE	KING	MQG	WA8180090039	112315		
442	Shell Oil Product US SAP 121433	Seattle	KING	MQG	WAD988503694	112332		
443	Shell Oil Products US SAP 121430	Seattle	KING	MQG	WAD988504056	112336		
444	Shell Oil Products US Seattle Terminal	SEATTLE	KING	MQG	WAD001684588	112339		
445	Shell Station 120441	SEATTLE	KING	MQG	WAD988503827	112359		
446	Shell Station 120463	SEATTLE	KING	MQG	WAD988503132	112380		
447	Shell Station 120682	SEATTLE	KING	MQG	WAD988503710	112418		
448	Shell Station 120716	SEATTLE	KING	MQG	WAD988503629	112441		
449	Shell Station 120761	SEATTLE	KING	MQG	WAD988502373	112446		
450	Shell Station 120865	SEATTLE	KING	MQG	WAD027464650	112449		
451	Shell Station 120877	SEATTLE	KING	MQG	WAD988483368	112483		
452	SHELL STATION 120984	SEATTLE	KING	MQG	WAD980985741	112484		
453	Shell Station 121083	SEATTLE	KING	MQG	WAD988503793	112489		
454	Shell Station 121350	SEATTLE	KING	MQG	WAD988503777	112495		
455	Shell Station 121450	SEATTLE	KING	MQG	WAD980986558	112501		
456	Shell Station 121456	SEATTLE	KING	MQG	WAD988503843	112509		
457	Shell Station 121607	SEATTLE	KING	MQG	WAD988489456	112515		
458	South Seattle Community College	SEATTLE	KING	MQG	WAD037414083	112516		
459	Superior Custom Cabinets Inc	Seattle	KING	MQG	WAD988493979	112589		
460	Swedish Hospital Medical Ctr	SEATTLE	KING	MQG	WAD079264420	112637		
461	Swedish Medical Center Providence	SEATTLE	KING	MQG	WAD057306524	112647		
462	Target Store 1284	Seattle	KING	MQG	WAH000026761	112661		
463	Texaco 121287	SEATTLE	KING	MQG	WAD980986491	112676		
464	Texaco Downstream 211577	SEATTLE	KING	MQG	WAD988483384	112702		
465	Thales Avionics Inc Seattle	Seattle	KING	MQG	WAH000029928	112719		
466	United Airlines Sea Tac Intl Airport	Seattle	KING	MQG	WAD981760945	112074		
467	Unocal 306516 Former	SEATTLE	KING	MQG	WAD988486940	113001		
468	Unocal SS No 5471	SEATTLE	KING	MQG	WAD982821043	113023		
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**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
470	UPS Seattle HUB	SEATTLE	KING	MQG	WAD053821997	113024		
471	US DOC NOAA NW Fisheries Science Center	SEATTLE	KING	MQG	WA8143690016	113028		
472	US DOC NOAA Western Regional Center	SEATTLE	KING	MQG	WA5131432085	109892		
473	US DOT DEA Loutsis Residence	Seattle	KING	MQG	WAH000029207	84537		
474	Virginia Mason Medical Center	SEATTLE	KING	MQG	WAD076654185	85512		
475	WA ARMY National Guard OMS 6	SEATTLE	KING	MQG	WA1211890040	91624		
476	WA DOT 1st Ave Warehouse/Office	SEATTLE	KING	MQG	WAH000034338	95593		
477	WA DOT Corson	SEATTLE	KING	MQG	WAD980981104	96100		
478	WA UW 1616 Bldg	Seattle	KING	MQG	WAH000029819	97671		
479	WA UW 815 Mercer	SEATTLE	KING	MQG	WAD988476578	103036		
480	Washington Hanover Co	Seattle	KING	MQG	WAH000034158	103183		
481	Westec Industries Inc	SEATTLE	KING	MQG	WAD988476271	103316		
482	Wilhelmsen Ship Services	Seattle	KING	MQG	WAH000033891	105879		
483	Young Corp Seattle	SEATTLE	KING	MQG	WAD053816146	106083		
484	Zyogenetics Inc	SEATTLE	KING	MQG	WA0000275552	108244		
485	WA Shoreline Community College	SHORELINE	KING	MQG	WAD980978472	112037		
486	Arco 6535	SNOHOMISH	KING	MQG	WAH000020446	110893		
487	Microconnex formerly Microsound	SNOQUALMIE	KING	MQG	WAH000010124	111292		
488	Philips Oral Healthcare	SNOQUALMIE	KING	MQG	WAH000008862	111595		
489	Highline Medical Center Specialty Campus	TUKWILA	KING	MQG	WAD988519096	109413		
490	Home Depot 4705	Tukwila	KING	MQG	WAR000009985	109933		
491	NC Machinery Co Seattle Branch	TUKWILA	KING	MQG	WAD027559327	110241		
492	NC Power Systems Co	TUKWILA	KING	MQG	WAD988476842	110349		
493	Purcell Painting & Coatings	Tukwila	KING	MQG	WAH000012104	111789		
494	Saybolt LP Tukwila	Tukwila	KING	MQG	WAD087600250	112390		
495	Shell Station 120598	TUKWILA	KING	MQG	WAD982651549	112440		
496	UPS Freight	Tukwila	KING	MQG	WAH000002998	112463		
497	UPS TUKWILA	TUKWILA	KING	MQG	WAD988496865	112638		
498	King Cnty Sheriff Dept 129th Ave	Vashon Island	KING	MQG	WAH000029353	97732		
499	Gerber Collision & Glass	WOODINVILLE	KING	MQG	WAD988489340	109952		
500	Praxair Specialty Ceramics	WOODINVILLE	KING	MQG	WAD988517512	110023		
501	Shell Oil Products US SAP 120596	Woodinville	KING	MQG	WAD981766330	112195		
502	SHELL STATION120707	WOODINVILLE	KING	MQG	WAR000008425	111860		
503	Universal Sheetmetal Inc	WOODINVILLE	KING	MQG	WAD980724272	110531		
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Businesses Generating Hazardous Waste in King County as of August 2009

	A			B	C	D	E	F	H	I
	NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID	Reported Number of SQGs			
505	Behr Process Corp	ALGONA	KING	SQG	WAH000001768	111013	ALGONA	2		
506	Wilsonart International Inc	ALGONA	KING	SQG	WA0000866822	111331	AUBURN	27		
507	Adesa Seattle Inc	AUBURN	KING	SQG	WAD988475042	113256	BELLEVUE	43		
508	Amtech Lighting Services Auburn	Auburn	KING	SQG	WAH000032697	108746	BOTHELL	9		
509	Armstrong Lumber Co Inc Auburn WA	AUBURN	KING	SQG	WAD042479410	109206	BURIEN	5		
510	Auburn Auto Machine LLC	AUBURN	KING	SQG	WAD988522066	109231	DES MOINES	2		
511	Auburn Foreign Car Inc	AUBURN	KING	SQG	WAD076129014	109306	DUVALL	1		
512	Auburn School Dist 408 Auburn HS	AUBURN	KING	SQG	WAD980738017	109402	ENUMCLAW	5		
513	Auburn School Dist 408 Transp Center	AUBURN	KING	SQG	WAD988483483	109485	FEDERAL WAY	10		
514	Auburn School Dist Support Svcs Ctr	AUBURN	KING	SQG	WAH000000794	109490	ISSAQUAH	13		
515	Bernard Motors	Auburn	KING	SQG	WAH000022571	109492	KENMORE	3		
516	Black Oxide LLC	Auburn	KING	SQG	WAD017334087	110298	KENT	61		
517	BNSF Railway Company Auburn	AUBURN	KING	SQG	WAD988512257	110310	KIRKLAND	16		
518	Bumstead Mfg Inc Auburn	AUBURN	KING	SQG	WAH000000364	110490	MAPLE VALLEY	4		
519	Case Dealer Holding Co LLC	Auburn	KING	SQG	WAD055718431	110996	MERCER ISLAND	3		
520	Crop Production Services Inc Auburn	Auburn	KING	SQG	WAH000028976	111733	NORTH BEND	4		
521	Dana Container Inc	Auburn	KING	SQG	WAH000012351	111735	PACIFIC	2		
522	Green River Community College	AUBURN	KING	SQG	WAD980738355	111843	PALMER (UJC)	1		
523	Oak Harbor Freight Lines Inc	AUBURN	KING	SQG	WAD002788347	111183	PRESTON (UJC)	2		
524	Peninsula Truck Lines Inc Auburn	AUBURN	KING	SQG	WAD002788438	111377	REDMOND	20		
525	Primus International Hansen Machine Div	AUBURN	KING	SQG	WAH000001321	111504	RENTON	29		
526	Qwest Corporation W00292	AUBURN	KING	SQG	WAD980985543	112266	SEATAC	4		
527	Raymond Handling Concepts Corp	Auburn	KING	SQG	WAH000031953	112520	SEATTLE	213		
528	Safeway Distribution Facility	Auburn	KING	SQG	WAH000028126	112553	SHORELINE	3		
529	Sams Club 6688	Auburn	KING	SQG	WAH000024522	112620	SKYKOMISH	1		
530	Tri Way Industries Inc 44th St NW	AUBURN	KING	SQG	WAH000013532	112809	SNOQUALMIE	2		
531	United States Gypsum Co	AUBURN	KING	SQG	WA0000885632	112839	TUKWILA	18		
532	Valley Pontiac Buick GMC	AUBURN	KING	SQG	WAD027255298	112853	WOODINVILLE	8		
533	Waxie Sanitary Supply	Auburn	KING	SQG	WAH000034018	113218	<b>Total</b>	<b>511</b>		
534	Avalon Bay Communities Inc	Bellevue	KING	SQG	WAH000028132	108855				
535	Bel Red Auto Rebuild	BELLEVUE	KING	SQG	WAD980975411	108958				
536	Bellevue Auto Rebuild Inc	BELLEVUE	KING	SQG	WAD009257692	108964				
537	Bellevue City Service Ctr	BELLEVUE	KING	SQG	WAD982654444	109056				
538	Bellevue School Dist 405	BELLEVUE	KING	SQG	WAD980982276	109114				
539	Bellevue School Dist Bellevue HS	BELLEVUE	KING	SQG	WAH000011049	109118				
540	Bellevue School Dist Interlake HS	BELLEVUE	KING	SQG	WAH000011056	109119				
541	Bellevue School Dist Newport HS	BELLEVUE	KING	SQG	WAH000011684	109122				
542	Bellevue School Dist Sammamish High Scho	BELLEVUE	KING	SQG	WAH000010728	109125				
543	Camaras West 1033	BELLEVUE	KING	SQG	WA0000048710	109515				
544	Camp Dresser & McKee	BELLEVUE	KING	SQG	WAH000002709	109590				
545	Chaplins Bellevue Mazda Subaru Volks	BELLEVUE	KING	SQG	WAD982653552	109593				

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
547	COCA COLA BOTTLING CO BELLEVUE	BELLEVUE	KING	SQG	WAD001328186	109669		
548	Exotic Motors Auto Rebuild Inc	BELLEVUE	KING	SQG	WA0000013508	109791		
549	Forest Ridge School of the Sacred Heart	BELLEVUE	KING	SQG	WAH000013334	109794		
550	GE IONICS INC	BELLEVUE	KING	SQG	WAD980977011	109981		
551	Hyatt Regency Bellevue	BELLEVUE	KING	SQG	WAD988501912	110016		
552	International Paper Bellevue	Bellevue	KING	SQG	WA0000275537	110068		
553	Kellys Eastside Wheel & Frame Inc	BELLEVUE	KING	SQG	WAD067155226	110334		
554	King Cnty DOT Metro Transit Bellevue	BELLEVUE	KING	SQG	WAD981766249	110381		
555	King Cnty Housing Auth Preservation Prog	Bellevue	KING	SQG	WAH000027165	110525		
556	Kits Camera 1012	BELLEVUE	KING	SQG	WA0000142935	110806		
557	Kwik N Clean	Bellevue	KING	SQG	WAD075148189	111113		
558	Maaco Auto Painting Bellevue	BELLEVUE	KING	SQG	WAD085808574	111817		
559	Midias Auto Service Experts Bellevue	BELLEVUE	KING	SQG	WAD988495958	111867		
560	Miller Paint Company Inc Bellevue	BELLEVUE	KING	SQG	WAD988517850	111357		
561	Motorworks Ltd	BELLEVUE	KING	SQG	WAD027261478	111492		
562	Pascal Co Inc	BELLEVUE	KING	SQG	WAD009260217	111322		
563	Precision Collision	BELLEVUE	KING	SQG	WA0000636951	109168		
564	PSE Factoria SVC	BELLEVUE	KING	SQG	WAR000006478	112262		
565	Rite Aid 5178	BELLEVUE	KING	SQG	WAH000010959	112567		
566	Rite Aid 5179	BELLEVUE	KING	SQG	WAR000008243	111272		
567	RNR Automotive Refinishing Inc 130th Ave	BELLEVUE	KING	SQG	WAR000011700	111277		
568	Safeway Inc Milk Dept	BELLEVUE	KING	SQG	WAH000000315	112692		
569	Safeway Warehouse Inc Dist Center	BELLEVUE	KING	SQG	WAD988482485	112073		
570	Seley Svcs Inc	BELLEVUE	KING	SQG	WAH000004614	112830		
571	Sephora 198 Bellevue Square	Bellevue	KING	SQG	WAH000021484	113148		
572	Service Master of Seattle	BELLEVUE	KING	SQG	WAD980738199	113201		
573	Sherwin Williams Finishes Bellevue 9831	BELLEVUE	KING	SQG	WAD988468732	96534		
574	STI Optonics Inc	BELLEVUE	KING	SQG	WAD055499800	101494		
575	Surrey North Auto Repair	BELLEVUE	KING	SQG	WAD093642643	102741		
576	Target Store 0339	Bellevue	KING	SQG	WAR000000059	107008		
577	USPS Vehicle Maint Facility Bellevue	BELLEVUE	KING	SQG	WA0180000119	108379		
578	Allegra Print & Imaging	Bothell	KING	SQG	WA0000181917	108660		
579	AR Kalmus Corp	BOTHELL	KING	SQG	WAH000004937	108793		
580	Buttera Motors Inc	BOTHELL	KING	SQG	WAD027271436	109351		
581	Dry Clean US	Bothell	KING	SQG	WAH000025393	109385		
582	General Dynamics OTS Inc Bothell	Bothell	KING	SQG	WAH0000034208	109971		
583	Midias Auto Service Experts Bothell	BOTHELL	KING	SQG	WAD988493201	110268		
584	PENSKE TRUCK LEASING CO LP BOTHELL	BOTHELL	KING	SQG	WAH0000034695	111818		
585								

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
586	The Seattle Times N Creek Facility	BOTHHELL	KING	SQG	WAD988505509	112349		
587	WA UW Bothell Campus	BOTHHELL	KING	SQG	WAH000006254	113192		
588	Earls Machine Shop	BURIEN	KING	SQG	WA0000189449	109046		
589	HSD Maintenance	BURIEN	KING	SQG	WAD013178355	109691		
591	Millennium Ford Inc	Burien	KING	SQG	WAD981761042	111471		
592	Miller Paint Co Inc Burien	BURIEN	KING	SQG	WAH000004762	111587		
593	Rite Aid 5227	BURIEN	KING	SQG	WAH000008763	112072		
594	Kent Learning Center	DES MOINES	KING	SQG	WAH000002527	109249		
595	Midway Sewer District	DES MOINES	KING	SQG	WAD081927493	111480		
596	Seattle Public Utilities Tolt Shop	DUVALL	KING	SQG	WAD988502852	111666		
597	Boeing A&M Twin Creeks Antenna Range	ENUMCLAW	KING	SQG	WAD988522843	109598		
598	Circle K Store 2701452	ENUMCLAW	KING	SQG	WAR000000562	109814		
599	Enumclaw School Dist Trans Dept	ENUMCLAW	KING	SQG	WAD988472486	110842		
600	Rite Aid 5185	ENUMCLAW	KING	SQG	WAR000005686	112229		
601	Tacoma Public Utilities Enumclaw Shops	ENUMCLAW	KING	SQG	WAH000024148	103549		
602	Brown Bear Car Wash Federal Way	Federal Way	KING	SQG	WAH000034406	109029		
603	Dow Jones & Co Inc	FEDERAL WAY	KING	SQG	WAD014636203	109367		
604	MEDCHEM SOURCE LLP	Federal Way	KING	SQG	WAH000022808	109572		
605	Ovals Motorsport Inc	FEDERAL WAY	KING	SQG	WAD988510012	109602		
606	Rite Aid 5175	FEDERAL WAY	KING	SQG	WAH000010835	110005		
607	Rite Aid 5186	FEDERAL WAY	KING	SQG	WA0001013440	110654		
608	Sears Unit 1099/6109	FEDERAL WAY	KING	SQG	WA0000569038	111087		
609	Target Store 1947	Federal Way	KING	SQG	WAH000026798	112181		
610	USPS Seattle Bulk Mail Ctr	FEDERAL WAY	KING	SQG	WA6180090056	112598		
611	Wal Mart Store 3794	Federal Way	KING	SQG	WAH000029667	112856		
612	Autoworks of Issaquah	ISSAQUAH	KING	SQG	WAD988490082	108794		
613	BMC Millwork	Issaquah	KING	SQG	WA0000952333	109467		
614	Federal Express Corp BVUA	ISSAQUAH	KING	SQG	WAH000006882	109603		
615	Issaquah City Facilities	Issaquah	KING	SQG	WAD988495909	110175		
616	Issaquah City PW Operations	Issaquah	KING	SQG	WAH000022729	111820		
617	King Cnty Library System Service Ctr	Issaquah	KING	SQG	WAD982656555	111348		
618	Lowes HIW 140	ISSAQUAH	KING	SQG	WAR000001057	111422		
619	Midas Auto Service Experts Issaquah	ISSAQUAH	KING	SQG	WAD988494738	111858		
620	Qwest Corporation W00866	ISSAQUAH	KING	SQG	WAD135983138	112312		
621	Rite Aid 5188	ISSAQUAH	KING	SQG	WAH000008789	112458		
622	Siemens Ultrasound	Issaquah	KING	SQG	WA0000113795	112873		
623	Silicon Designs Inc	ISSAQUAH	KING	SQG	WAD118951326	113154		
624	Swedish Medical Center Issaquah	ISSAQUAH	KING	SQG	WAD988470985	113112		

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID			
625	Kenmore Camera	KING	SQG	WAH000031100	110981			
626	North Lake Marina	KING	SQG	WAH000020305	112249			
627	Sherwin Williams Store 8099	KENMORE	SQG	WAH000019752	108318			
628	ABF FREIGHT SYSTEM KENT	KENT	SQG	WAH000021222	113244			
629	Access Business Group LLC NWSC	KING	SQG	WAH000023761	113254			
630	Advanced Images Inc	KENT	SQG	WAH000018333	108801			
631	American Steel LLC	KENT	SQG	WAD988510632	108993			
632	Baywood Cabinet Inc	Kent	SQG	WAH000021514	109009			
633	Bowen Scarff Ford Auto Rebuild	KING	SQG	WAD027334754	109028			
634	Bowen Scarff Ford Inc	KING	SQG	WAD027333541	109059			
635	Bret Chevrolet	KING	SQG	WAD027334622	109107			
636	Brundage Bone Concrete Pumping	KING	SQG	WAD988499042	109126			
637	Chevron 206670	KENT	SQG	WAH000006312	109131			
638	Chevron 207528	KING	SQG	WAH000006114	109200			
639	Compass Aerospace Northwest	KING	SQG	WAD988510418	109209			
640	Diamond Power Specialty Company	KING	SQG	WAH000001784	109235			
641	DSN Marketing Enterprises Inc	KING	SQG	WAH000002717	109400			
642	Fawcett Painting Inc 192nd St	KENT	SQG	WAH000009886	110009			
643	FedEx Express - SEAA	KENT	SQG	WAD988474672	110171			
644	FEDEX NATIONAL LTL SEA	KING	SQG	WAH000034534	110179			
645	Forrest Paint Co	KENT	SQG	WAD988524450	110180			
646	Holman Distribution Center of WA Kent	KENT	SQG	WAH000013805	110292			
647	Home Depot 5799	Kent	SQG	WAH000026822	110315			
648	Insulfoam	Kent	SQG	WAD070399456	110330			
649	International Leasing Co Inc S 212th	KENT	SQG	WAD988499752	110501			
650	INX International Ink Co	Kent	SQG	WAH000021477	110575			
651	Japanese Auto Sales & Service	KENT	SQG	WAH000020636	110673			
652	Kent Meridian High School	KING	SQG	WAD988479333	110696			
653	Kent Police Training Center	Kent	SQG	WAH000023048	110793			
654	Kent School Dist 415 Transportation	KENT	SQG	WAD981771470	110795			
655	Kent School Dist Maint Dept	KENT	SQG	WAD013178363	110916			
656	Kent School Dist Soos Creek Elementary	Kent	SQG	WAH000029883	111785			
657	Kentwood High School	KING	SQG	WAD159142702	111794			
658	La Croix Ind Inc	KENT	SQG	WAD988480562	111807			
659	Lakeridge Paving Co LLC	KENT	SQG	WAD988481743	111808			
660	Maaco Collision Repair & Auto Painting	Kent	SQG	WAH000029470	111811			
661	Magnum Venus Plastech	Kent	SQG	WAD009285602	111813			
662	Meridian Middle School	KING	SQG	WAH000006247	111894			
663								

**Businesses Generating Hazardous Waste in King County as of August 2009**

	A		B	C	D	E	F	H	I
	NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID			
664	Mikron Industries F Bldg	KENT	KING	SQG	WAH000017582	111088			
665	Mill Creek Middle School	KENT	KING	SQG	WAD988481602	111099			
666	Miller Paint Company Inc Kent	KENT	KING	SQG	WAH000020479	111151			
667	MODERN MACHINERY	KENT	KING	SQG	WAD051250611	111215			
668	Murrays Collision Center	KENT	KING	SQG	WAD981771538	111235			
669	Patterson Logistics Services Inc	Kent	KING	SQG	WAH000032480	111419			
670	Penske Truck Leasing	KENT	KING	SQG	WAD014332951	111428			
671	Portrait Innovations Kent	Kent	KING	SQG	WAH000032397	111484			
672	Potelco Inc	KENT	KING	SQG	WAD988484077	111489			
673	PPG Training Center Kent	KENT	KING	SQG	WAD988523247	111493			
674	PSE Kent Fleet 2	Kent	KING	SQG	WAR000001206	111510			
675	PSE South King Complex	KENT	KING	SQG	WAR000006569	111561			
676	QCM CO	KENT	KING	SQG	WAD047488390	112209			
677	Qwest Corporation W00825	KENT	KING	SQG	WAD980984413	111946			
678	Qwest Corporation W00963	KENT	KING	SQG	WAD980984355	111862			
679	Rexam Beverage Can Co	KENT	KING	SQG	WAD053823571	112314			
680	Rockwell Collins Seattle Service Center	Kent	KING	SQG	WAH000029738	112378			
681	Rottler Mfg Co	KENT	KING	SQG	WAD009246786	112609			
682	Saia Motor Freight Line Inc	KENT	KING	SQG	WAH000000588	112706			
683	SB Truck Service	KENT	KING	SQG	WA0000148759	112707			
684	Smith Fabrication Inc	KENT	KING	SQG	WAD988518759	112956			
685	Titus Tool Co	KENT	KING	SQG	WAD988510921	113162			
686	US DOE BPA Covington Substation	KENT	KING	SQG	WA3891406339	113231			
687	USF Reddaway Inc Kent	KENT	KING	SQG	WAH000007542	9849			
688	WA ARMY National Guard Oms 5	KENT	KING	SQG	WA0211890041	104539			
689	Western Metal Arts and Sign	KENT	KING	SQG	WAD982659559	105951			
690	Creative Label Inc Kirkland	KIRKLAND	KING	SQG	WAD982654410	108550			
691	Evergreen Auto Rebuild Inc	KIRKLAND	KING	SQG	WAD070392303	108738			
692	Evergreen Hospital Medical Ctr	KIRKLAND	KING	SQG	WA0000345306	108866			
693	Evergreen Pharmaceutical	Kirkland	KING	SQG	WAH000033703	108905			
694	Hirschler Mfg Inc	KIRKLAND	KING	SQG	WAD009492372	109080			
695	Juanita Firs Shell	KIRKLAND	KING	SQG	WAD988466504	109108			
696	Kirkland City Maint Center	KIRKLAND	KING	SQG	WAD988472353	109348			
697	Lee Johnson Chevrolet Mazda	KIRKLAND	KING	SQG	WAD027339217	110303			
698	LM Body Shop	KIRKLAND	KING	SQG	WAD981768161	110877			
699	McLeod Auto Body	KIRKLAND	KING	SQG	WAD982655540	110902			
700	Micro Encoder Inc	KIRKLAND	KING	SQG	WAD988474102	111719			
701	Midas Auto Service Experts Kirkland	KIRKLAND	KING	SQG	WAD988494746	111821			
702									

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
703	Proctor Products Co Inc	KIRKLAND	SQG	WAD988474797	111503			
704	Showcase Auto Rebuild	KIRKLAND	SQG	WAD044596211	112297			
705	Sign Factory The	KIRKLAND	SQG	WAH000014654	113002			
706	Yarrow Bay Yacht Sales & Svc	KIRKLAND	SQG	WAD988493961	108326			
707	Cedar Grove Composting Inc	MAPLE VALLEY	SQG	WAR000009670	108851			
708	Motorplex 264th St	MAPLE VALLEY	SQG	WAH000001651	109654			
709	Seattle Public Utilities Landsburg Treat	MAPLE VALLEY	SQG	WAH000001941	110992			
710	Western Asphalt Inc Maple Vly	MAPLE VALLEY	SQG	WAD988483673	111830			
711	Farmers New World Life Insurance Co	MERCER ISLAND	SQG	WAD054839766	109398			
712	Rite Aid 5197	MERCER ISLAND	SQG	WA0001013465	109606			
713	Shell Station 121549	MERCER ISLAND	SQG	WAD988503876	111451			
714	North Bend Auto Parts Inc	NORTH BEND	SQG	WAH000010827	109030			
715	North Bend City	North Bend	SQG	WAH000022826	109977			
716	Seattle Public Utilities Watershed Mgmt	NORTH BEND	SQG	WAD988466041	110982			
717	WA State Patrol Fire Academy	NORTH BEND	SQG	WAD988508487	112302			
718	Hydraulic Installation & Repair Inc	PACIFIC	SQG	WAD988481636	108808			
719	Valley Freightliner Inc Steward Rd	PACIFIC	SQG	WAD981760838	107087			
720	Tacoma Pub Util Water Div Headworks	PALMER	SQG	WAH000003160	110838			
721	Crittenden Conversion Corp	PRESTON	SQG	WAD066649104	111531			
722	National Precision Bearing Preston	PRESTON	SQG	WAR000009852	111944			
723	Akzo Nobel Paints #767	REDMOND	SQG	WAD988518783	108870			
724	Bear Creek Village Shopping Ctr	REDMOND	SQG	WAH000004143	108877			
725	Ecolab	Redmond	SQG	WAH000025412	109261			
726	Gerber Collision & Glass	REDMOND	SQG	WAD137312609	109287			
727	Harmony Music	REDMOND	SQG	WAH000015115	109296			
728	Interpoint	REDMOND	SQG	WAD980977805	109609			
729	King & Prince Seafood Corp	Redmond	SQG	WAD187910138	109681			
730	Kits Cameras 1007	REDMOND	SQG	WA0000902346	109956			
731	Koronis Pharmaceuticals	REDMOND	SQG	WAH000006650	110066			
732	Paroscientific Inc	REDMOND	SQG	WAD982658882	110293			
733	PSE North King Svc Ctr	REDMOND	SQG	WAR000006502	111125			
734	Qualitel Corp	REDMOND	SQG	WAH000013151	111136			
735	REDMOND CITY MAINTENANCE	REDMOND	SQG	WAD982653453	112136			
736	Redmond Workshop	REDMOND	SQG	WAH000009977	112180			
737	Rite Aid 5199	REDMOND	SQG	WA0001013358	111273			
738	Rite Aid 5200	REDMOND	SQG	WA0001013598	112616			
739	Sears Unit 1069/6119	REDMOND	SQG	WA0000569020	112913			
740	Target Store 0995	Redmond	SQG	WAH000026715	112947			
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**Businesses Generating Hazardous Waste in King County as of August 2009**

	A			B	C	D	E	F	H	I
	NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID				
742	Trugreen Chemlawn	REDMOND	KING	SQG	WAD988493623	113122				
743	Washington Screenprint	REDMOND	KING	SQG	WAD981763519	109904				
744	AO Smith Water Products Co	RENTON	KING	SQG	WAR00011395	108788				
745	Bankers Auto Rebuild & Towing	RENTON	KING	SQG	WAD027396266	109514				
746	ConocoPhillips Renton Terminal	RENTON	KING	SQG	WAD000641530	109983				
747	Gene Meyer Inc	RENTON	KING	SQG	WAD027398684	110177				
748	Gudmundson Co Inc	RENTON	KING	SQG	WAD069560506	110226				
749	Kennys Auto Rebuild Inc	Renton	KING	SQG	WAD027398213	110378				
750	Kenworth Truck Research & Development	Renton	KING	SQG	WAH000023175	110402				
751	KING COUNTY PARKS	RENTON	KING	SQG	WAD981764335	110491				
752	Northwest Handling Systems Inc Renton Br	RENTON	KING	SQG	WAH000002550	110755				
753	Pacific Coca Cola Bottling Co Renton	RENTON	KING	SQG	WAD988488334	110980				
754	Precision Aircraft Inc	RENTON	KING	SQG	WAD988474052	111084				
755	PSE Shuffleton Substation Complex	RENTON	KING	SQG	WAD980977417	111093				
756	PSE Swair Station	RENTON	KING	SQG	WAR000006007	111310				
757	Qwest Corporation W00276	RENTON	KING	SQG	WAD000641407	111375				
758	Renton Cleaning Center	RENTON	KING	SQG	WAD988481255	111527				
759	Renton Honda Automobile	RENTON	KING	SQG	WAD988492898	112273				
760	Renton Kia Service Center	RENTON	KING	SQG	WAH000020412	110135				
761	Renton School Dist 403	RENTON	KING	SQG	WAD982659856	112011				
762	Renton Technical College	RENTON	KING	SQG	WAD085188308	111849				
763	Renton USAR Ctr	RENTON	KING	SQG	WAR000009811	112461				
764	Sams West 4835	RENTON	KING	SQG	WAH000025909	112596				
765	Seattle Public Utilities Lk Youngs Maint	RENTON	KING	SQG	WAD988499596	112732				
766	South End Auto Wrecking Inc	RENTON	KING	SQG	WAD988522579	112788				
767	Target Store 2290	Renton	KING	SQG	WAH000031911	112799				
768	Unified Grocers Inc Renton	Renton	KING	SQG	WAH000033026	112802				
769	Walkers Renton MAZDA	RENTON	KING	SQG	WAD988524542	112961				
770	Walkers Renton Subaru	Renton	KING	SQG	WAH000025058	113220				
771	YOUNKER MOTORS	RENTON	KING	SQG	WAH000034713	113222				
772	YOUNKER MOTORS INC	RENTON	KING	SQG	WAD027400399	103913				
773	Budget Rent A Car System Inc	SeaTac	KING	SQG	WAH000032426	108773				
774	Kenworth NW SeaTac	SEATAC	KING	SQG	WAD046693305	112608				
775	Monroe Machined Products Inc	SEATAC	KING	SQG	WAD009244559	113101				
776	Trugreen Landcare	SEATAC	KING	SQG	WAD980977524	113182				
777	76 Service Station 11069 Dravus	SEATTLE	KING	SQG	WAD988519575	108692				
778	AC Propeller Service Inc	SEATTLE	KING	SQG	WAD044041259	108723				
779	Acu Line Corp	SEATTLE	KING	SQG	WAD102868213	108726				

Businesses Generating Hazardous Waste in King County as of August 2009

	A		B	C	D	E	F	H	I
	NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID			
781	Aero Metric Inc	SEATTLE	KING	SQG	WAR00005405	108734			
782	AeroGo Inc	SEATTLE	KING	SQG	WAD988499018	108741			
783	Akis Body Shop Inc	SEATTLE	KING	SQG	WAD180298416	108743			
784	Alaska Airlines	SEATTLE	KING	SQG	WAD988494167	108783			
785	Alaska Diesel Electric Inc	Seattle	KING	SQG	WAD061672127	108797			
786	Alexis Hotel	SEATTLE	KING	SQG	WAH000032371	108809			
787	Alpac Corp	SEATTLE	KING	SQG	WAD009252123	108826			
788	American Seafoods Co LLC	SEATTLE	KING	SQG	WAH000019554	108837			
789	Amtrak W King St Yard Hoigate St	SEATTLE	KING	SQG	WAH000010819	108860			
790	Andy's Auto Repair	SEATTLE	KING	SQG	WAD988500096	108861			
791	Arco 5246	SEATTLE	KING	SQG	WAD988514840	108862			
792	Argo Blower & Mfg Co Inc	SEATTLE	KING	SQG	WAD988492120	108981			
793	Asahipen America Inc	SEATTLE	KING	SQG	WAD080898984	109002			
794	Aurora Collision Ctr Inc	SEATTLE	KING	SQG	WAD037990512	109011			
795	Ballinger Automotive	SEATTLE	KING	SQG	WAD988510244	109016			
796	Bank & Office Interiors	SEATTLE	KING	SQG	WAD988522074	109050			
797	Benaroya Research Institute at Virginia	SEATTLE	KING	SQG	WAH000008300	109055			
798	Bernard Import Bodyworks	SEATTLE	KING	SQG	WAD009259839	109069			
799	Big E Auto Rebuild Inc	SEATTLE	KING	SQG	WAD080901531	109073			
800	BNSF Railway Company Seattle	SEATTLE	KING	SQG	WAD980983571	109085			
801	Boeing A&M Electronic Mfg Facility	SEATTLE	KING	SQG	WAD980980270	108931			
802	Burien Toyota	SEATTLE	KING	SQG	WAD980979405	109128			
803	BYG Coop	SEATTLE	KING	SQG	WAD988511473	109178			
804	Cameras West 1032	SEATTLE	KING	SQG	WA0000048702	109217			
805	Campus Cleaners	SEATTLE	KING	SQG	WAD144253283	109227			
806	Carson Cleaners Inc	SEATTLE	KING	SQG	WAD027417716	109368			
807	Cassieford Inc	SEATTLE	KING	SQG	WAH000010207	109383			
808	Champagne Service Inc	SEATTLE	KING	SQG	WAD988501821	109421			
809	Chemithon Corp	SEATTLE	KING	SQG	WAD009244898	109445			
810	Chevron 200410	SEATTLE	KING	SQG	WAD988489613	109530			
811	Colorgraphics Inc	SEATTLE	KING	SQG	WAD988487898	109574			
812	Container Care Seattle	SEATTLE	KING	SQG	WAD040197014	109581			
813	Cooks Auto Rebuild Inc	SEATTLE	KING	SQG	WAD050180165	109600			
814	CSR Marine Inc	SEATTLE	KING	SQG	WAD156914897	109684			
815	Dalys Inc	SEATTLE	KING	SQG	WAD009261801	109685			
816	Deeny Construction Co Inc	SEATTLE	KING	SQG	WAD988513560	109688			
817	Delta Air Lines Seattle	SEATTLE	KING	SQG	WAD980977946	109689			
818	Emerald Galvanizing Inc	Seattle	KING	SQG	WAD980975486	109690			
819									



Businesses Generating Hazardous Waste in King County as of August 2009

	A		B	C	D	E	F	H	I
	NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID			
820	Epigenomics Inc	SEATTLE	KING	SQG	WAH000014803	109692			
822	Fabrication & Truck Equipment	SEATTLE	KING	SQG	WAD988498416	109699			
823	Fairmont Olympic Hotel	SEATTLE	KING	SQG	WAD980725311	109735			
824	FedEx Express SEAR	SEATTLE	KING	SQG	WAD988474714	109761			
825	FedEx Express BFIA	SEATTLE	KING	SQG	WAH000017137	109793			
826	Fishing Vessel Owners Marine Ways Inc	SEATTLE	KING	SQG	WAD067135129	109797			
827	Fred Hutchinson Cancer Research Ctr East	Seattle	KING	SQG	WAH000027887	109798			
828	Gallery Marine Services LLC	SEATTLE	KING	SQG	WAD988523494	109627			
829	Gem East Corp	SEATTLE	KING	SQG	WAD009486762	109632			
830	Goodyear Svc Store Seattle 8841	SEATTLE	KING	SQG	WAD149982480	109805			
831	Greyhound Lines Inc Seattle 780013	SEATTLE	KING	SQG	WAD988497376	109834			
832	Guernsey Ostergard Inc	SEATTLE	KING	SQG	WAD009499575	109837			
833	Hatch & Kirk Inc	SEATTLE	KING	SQG	WAD027436278	109838			
834	HD Supply Construction Supply WC 0062	Seattle	KING	SQG	WAD057303968	109936			
835	Heartwood Inc	SEATTLE	KING	SQG	WAD982656431	110014			
836	High Road Automotive	SEATTLE	KING	SQG	WAD988486379	110024			
837	Hines 720 Olive Way Lp	Seattle	KING	SQG	WAH000030913	110193			
838	Horizon House	SEATTLE	KING	SQG	WAH000001974	110221			
839	Industrial Container Services WA LLC	SEATTLE	KING	SQG	WAD000066084	110256			
840	Ingersoll Rand 6th Ave	SEATTLE	KING	SQG	WAD063368583	110264			
841	Institute for Systems Biology	Seattle	KING	SQG	WAH000028258	110269			
842	Interstate Brands Corp Hostess	Seattle	KING	SQG	WAD009490343	110275			
843	King Cnty Airport Maintenance	SEATTLE	KING	SQG	WAD980986848	110288			
844	King Cnty DOT Metro Transit Ryerson	SEATTLE	KING	SQG	WAD981766132	110302			
845	King Cnty International Airport	Seattle	KING	SQG	WAH0000031371	110306			
846	King Cnty Medical Examiner	Seattle	KING	SQG	WAR000007054	110320			
847	King Co DOT Metro Transit Power Distrib	SEATTLE	KING	SQG	WAD981773542	110372			
848	Kits Camera 1003	SEATTLE	KING	SQG	WA0000568907	110385			
849	Kits Camera 1028	SEATTLE	KING	SQG	WAR000000729	110388			
850	Kits Camera 1029	SEATTLE	KING	SQG	WAR000001339	110391			
851	Kits Cameras 1011	SEATTLE	KING	SQG	WAR000002568	110396			
852	Kwik Cleaners	SEATTLE	KING	SQG	WAD092285592	110397			
853	Lakeside School	SEATTLE	KING	SQG	WAD089337984	109716			
854	LeClercq Marine Construction Inc	SEATTLE	KING	SQG	WAD980834188	110410			
855	Lifespan Biosciences	SEATTLE	KING	SQG	WAH000017913	110422			
856	Lowes HIW 004	SEATTLE	KING	SQG	WAR000001065	110444			
857	Lowes HIW 252	SEATTLE	KING	SQG	WAH000000372	110577			
858	Lucca Statuary Leary Way	Seattle	KING	SQG	WAR000008920	110594			

Businesses Generating Hazardous Waste in King County as of August 2009

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA Site ID	Site ID			
859	Miaco Auto Painting Bodywork 9th Ave	SEATTLE	KING	SQG	WAD988523114	110625		
860	Malos Auto Body	SEATTLE	KING	SQG	WAD053816120	110689		
861	Manson Construction Co	Seattle	KING	SQG	WAD007942824	110832		
862	Marine Systems Inc Seattle	SEATTLE	KING	SQG	WAH000034386	110892		
863	McCallum Envelope & Printing	SEATTLE	KING	SQG	WAD988524336	110945		
864	Medical Dental Bldg	SEATTLE	KING	SQG	WAD147231021	110979		
865	Midas Auto Service Experts Ballard	SEATTLE	KING	SQG	WAD988494720	111016		
866	Miller Paint Co Inc Seattle	Seattle	KING	SQG	WAD988495420	111017		
867	Miller Paint Company Corson Ave	SEATTLE	KING	SQG	WAD981763352	111035		
868	Mobile Crane Co Inc	SEATTLE	KING	SQG	WAD988492823	111049		
869	NANOSTRING TECHNOLOGIES	SEATTLE	KING	SQG	WAH000034654	111701		
870	Native Brightworks	SEATTLE	KING	SQG	WAD988514279	111721		
871	No 1 Japanese Auto Repair	SEATTLE	KING	SQG	WAD988504767	111736		
872	Nordic Svcs Inc	SEATTLE	KING	SQG	WAR000005900	111748		
873	Nordstrom Inc	SEATTLE	KING	SQG	WAD981773583	111749		
874	North Seattle Community College	SEATTLE	KING	SQG	WAD982654725	111775		
875	NORTH SERVICE CENTER	SEATTLE	KING	SQG	WAH000022014	111780		
876	North Star Ice Equipment Inc	Seattle	KING	SQG	WAD988492302	111815		
877	Northwest Lighting Services Co The	SEATTLE	KING	SQG	WAH000032502	111833		
878	Northwest Sign Supply	SEATTLE	KING	SQG	WAH000010520	111840		
879	Olympus Press Inc	SEATTLE	KING	SQG	WAD009482506	111875		
880	Pacific Science Center	SEATTLE	KING	SQG	WAH000019513	111899		
881	Penske Truck Leasing Co LP	SEATTLE	KING	SQG	WAD009416033	111921		
882	Penske Truck Leasing Co LP	SEATTLE	KING	SQG	WAH000017673	111928		
883	Phinney Ridge Cleaners	SEATTLE	KING	SQG	WAD027462647	111937		
884	Pioneer Industries Plant 2	Seattle	KING	SQG	WAD988482352	111077		
885	Plastic Sales & Service Inc	Seattle	KING	SQG	WAH000026342	111109		
886	Popich Sign Company Inc	SEATTLE	KING	SQG	WAH000022792	111114		
887	Professional Collision Moores	SEATTLE	KING	SQG	WAD070057674	111138		
888	PS Industries Inc	SEATTLE	KING	SQG	WAD988476107	111147		
889	PSE Georgetown Base	SEATTLE	KING	SQG	WAD988481677	111160		
890	Puget Sound Blood Center Main Branch Sea	SEATTLE	KING	SQG	WAD988476339	111189		
891	Quest Diagnostics Inc	SEATTLE	KING	SQG	WAD006107205	111191		
892	Quest Corporation W00128	SEATTLE	KING	SQG	WAD980984595	111197		
893	Quest Corporation W00291	SEATTLE	KING	SQG	WAD980984710	111200		
894	Quest Corporation W00307	SEATTLE	KING	SQG	WAD980984652	111663		
895	Quest Corporation W00319	SEATTLE	KING	SQG	WAH000005876	111267		
896	Quest Corporation W00A80	SEATTLE	KING	SQG	WAR000008136	111332		
897								

Businesses Generating Hazardous Waste in King County as of August 2009

A		B	C	D	E	F	H	I
NAME	CITY	COUNTY	Type	RCRA_Site_ID	Site ID			
898	R & H Garage Ltd	SEATTLE	KING	SQG	WAD988484432	111335		
899	Radtko Marine Inc	SEATTLE	KING	SQG	WAR00009191	111351		
900	Rainier Auto Body	SEATTLE	KING	SQG	WAD027465202	111352		
901	Ravenna Motors Inc	SEATTLE	KING	SQG	WAD027465715	111364		
902	Richmark Co	SEATTLE	KING	SQG	WAD009252081	111376		
903	Ricks Master Marine Inc	SEATTLE	KING	SQG	WA0000016113	111379		
904	Rite Aid 5210	SEATTLE	KING	SQG	WA0001013614	111382		
905	Rite Aid 5212	SEATTLE	KING	SQG	WA0001013630	111404		
906	Rite Aid 5216	SEATTLE	KING	SQG	WA0001013648	111412		
907	Rite Aid 5217	SEATTLE	KING	SQG	WAH000010868	111432		
908	Rite Aid 5218	SEATTLE	KING	SQG	WAR000002709	111456		
909	Rite Aid 5228	SEATTLE	KING	SQG	WA0001013499	111513		
910	Rite Aid 6234	SEATTLE	KING	SQG	WAH000010934	111560		
911	Rite Aid Corp 5224	SEATTLE	KING	SQG	WAR000010090	111586		
912	Rose St Auto Repair Inc	SEATTLE	KING	SQG	WAD988513214	111606		
913	Scougal Rubber Corp	SEATTLE	KING	SQG	WAD067159442	111634		
914	Seacast Inc Seattle	SEATTLE	KING	SQG	WAD988492906	111640		
915	SEAFREEZE COLD STORAGE	SEATTLE	KING	SQG	WAD988496725	111650		
916	Sears Unit 1059/6028/8119	SEATTLE	KING	SQG	WA0000569012	111658		
917	Sears Unit 6239	SEATTLE	KING	SQG	WAR000010124	112110		
918	Seattle Art Museum Volunteer Park	SEATTLE	KING	SQG	WAD988513040	112139		
919	Seattle Barrel Co	SEATTLE	KING	SQG	WAD027470111	112153		
920	Seattle Center	SEATTLE	KING	SQG	WAD981768252	112179		
921	Seattle Central Community College	SEATTLE	KING	SQG	WAD980833529	112183		
922	Seattle City North Recycling & Disp	SEATTLE	KING	SQG	WAD980985642	112200		
923	Seattle City Parks Recreat Pier 59	SEATTLE	KING	SQG	WA0000229872	112219		
924	Seattle City Public Utilities Water Qual	SEATTLE	KING	SQG	WAH000013474	112290		
925	Seattle City SDOT Charles Street	SEATTLE	KING	SQG	WAD981768765	112299		
926	Seattle City SDOT Haller Lake	SEATTLE	KING	SQG	WAD988505137	112254		
927	Seattle City SDOT Sunny Jim	SEATTLE	KING	SQG	WAD988508156	110115		
928	Seattle City South Lake Union	SEATTLE	KING	SQG	WA8170023412	110119		
929	Seattle City/SDOT West Seattle	SEATTLE	KING	SQG	WAD981765183	110142		
930	Seattle Comm College Wood Construction	SEATTLE	KING	SQG	WAD980978209	110151		
931	Seattle Machine Works Inc	SEATTLE	KING	SQG	WAD988480711	112355		
932	Seattle Marine & Fishing Supply Co	Seattle	KING	SQG	WAH0000033532	112396		
933	Seattle Public Utilities Drainage WW Ops	SEATTLE	KING	SQG	WAH000003954	112453		
934	Seattle Public Utilities Hbr Is Orfl	SEATTLE	KING	SQG	WAH000017566	112465		
935	Seattle Public Utilities North Operation	SEATTLE	KING	SQG	WAH000019372	112538		
936								

Businesses Generating Hazardous Waste in King County as of August 2009

	A		B		C		D		E		F	H	I
	NAME		NAME		NAME		NAME		NAME		NAME		
937	Seattle Public Utilities Operations Ctr		SEATTLE		KING		SQG		WAD980981229		112541		
938	Seattle School Dist 1 Ballard HS		SEATTLE		KING		SQG		WAD988490512		112550		
939	Seattle School Dist 1 Nathan Hale HS		SEATTLE		KING		SQG		WAD120485412		112576		
940	Seattle School Dist 1 Rainier Beach HS		SEATTLE		KING		SQG		WAD988504817		112610		
941	Seattle School Dist 1 Roosevelt HS		SEATTLE		KING		SQG		WAD988504825		112618		
942	Seattle University		SEATTLE		KING		SQG		WAD981760820		112623		
943	Seattle Vocational Institute		SEATTLE		KING		SQG		WAR00007039		112644		
944	Sephora 200 University Village	Seattle			KING		SQG		WAH000021350		112688		
945	Snopac Products Inc	Seattle			KING		SQG		WAH000026134		112767		
946	Sound Transit LINK Op & Maintenance Fac	Seattle			KING		SQG		WAH000034232		112775		
947	South Park Marina	Seattle			KING		SQG		WAD988513248		112064		
948	SPARKLE CLEANERS	Seattle			KING		SQG		WAD988522587		112797		
949	Stadium Dry Cleaners	Seattle			KING		SQG		WAD027474311		112806		
950	Star Rentals Inc Seattle	Seattle			KING		SQG		WAD027474626		112811		
951	Sun Cleaners Seattle	Seattle			KING		SQG		WAD988489241		112820		
952	Swedish Medical Center	Seattle			KING		SQG		WAH000016204		112832		
953	Swedish Medical Ctr Ballard	Seattle			KING		SQG		WAH000000851		112833		
954	Swissport Fueling Inc	Seattle			KING		SQG		WAD000641704		112834		
955	System Seven Repair Inc	Seattle			KING		SQG		WAD982659344		112835		
956	Target Store 0637	Seattle			KING		SQG		WAH000027940		112836		
957	Three Brothers Cleaners	Seattle			KING		SQG		WAD988486445		112837		
958	Unico Properties Inc 1200 5th	Seattle			KING		SQG		WAH000023324		112862		
959	Unico Properties Inc 1215 4th	Seattle			KING		SQG		WAH000023330		112871		
960	Unico Properties Inc 1301 5th	Seattle			KING		SQG		WAH000023291		112940		
961	Unico Properties Inc 1305 4th	Seattle			KING		SQG		WAH000023306		112960		
962	Unico Properties Inc 1325 4th	Seattle			KING		SQG		WAD988476834		112964		
963	Unico Properties Inc 1326 5th	Seattle			KING		SQG		WAH000023314		113022		
964	Unified Grocers Inc	Seattle			KING		SQG		WAD007942535		113057		
965	Union Bay Garage Inc	Seattle			KING		SQG		WAD027480185		113059		
966	UNION PACIFIC RAILROAD CO DAWSON	Seattle			KING		SQG		WAH000016659		113074		
967	United Iron Works Inc	Seattle			KING		SQG		WAH00008482		112034		
968	Univar USA Inc	Seattle			KING		SQG		WAR000005579		113124		
969	University Swaging Corp	Seattle			KING		SQG		WAD988505616		113133		
970	UPS Boeing Field	Seattle			KING		SQG		WAD988521563		113149		
971	US Army Center Fort Lawton	Seattle			KING		SQG		WA3210090095		113163		
972	US ARMY COE Lake Washington Ship Canal	Seattle			KING		SQG		WA3960010152		113099		
973	USPS Seattle P&DC	Seattle			KING		SQG		WAH000000596		113110		
974	USPS Vehicle Maint Facility Seattle	Seattle			KING		SQG		WA5180000155		113187		
975													

**Businesses Generating Hazardous Waste in King County as of August 2009**

A		B		C		D		E		F		H		I	
NAME		NAME		NAME		NAME		NAME		NAME					
976	V Van Dyke Inc	SEATTLE		KING		SQG		WAD988516779		113198					
977	WA AIR National Guard Boeing N Field	SEATTLE		KING		SQG		WAD147234637		109906					
978	WA State Toxicology Lab WSP	Seattle		KING		SQG		WA000026849		113217					
979	WA UW 2211 Elliott Ave	Seattle		KING		SQG		WAH000027427		5052					
980	WA UW Childrens Hospital	SEATTLE		KING		SQG		WA0000905067		101629					
981	WA UW Consolidated Laundry	Seattle		KING		SQG		WAD982652984		102553					
982	WA UW Queen Anne	SEATTLE		KING		SQG		WAD988507703		103449					
983	WA UW Roosevelt One	SEATTLE		KING		SQG		WA0000916635		104811					
984	WA UW Rosen Bldg	SEATTLE		KING		SQG		WAH000007914		106168					
985	WA UW Washington Park Arboretum	SEATTLE		KING		SQG		WAR000008730		106568					
986	WA UW Western Ave	SEATTLE		KING		SQG		WAH000005462		106644					
987	Washington Tree Service Inc Seattle	SEATTLE		KING		SQG		WAD988515326		106802					
988	West Point Treatment Plant	SEATTLE		KING		SQG		WAD0000854067		107401					
989	West Seattle Dental Center	SEATTLE		KING		SQG		WA0000866871		107673					
990	Western Fisheries Research Center	SEATTLE		KING		SQG		WA3143537592		107925					
991	Western Industrial Inc Storage Lot	Seattle		KING		SQG		WAH000032164		108096					
992	Western Towboat Co	SEATTLE		KING		SQG		WAD988508834		108097					
993	Westfarm Foods Seattle	Seattle		KING		SQG		WAD103375150		108109					
994	Woodland Park Zoological Society	SEATTLE		KING		SQG		WA0000932707		108313					
995	YRC Inc Seattle	SEATTLE		KING		SQG		WAH000014712		108378					
996	Seattle City Light Shoreline Substation	Shoreline		KING		SQG		WAH000027398		109548					
997	Shoreline Christian School	SHORELINE		KING		SQG		WAH000013094		111408					
998	WA DSHS Fircrest School	SHORELINE		KING		SQG		WAD070973888		113050					
999	Skykomish School Dist 404	SKYKOMISH		KING		SQG		WAD013278858		112643					
1000	Alpine Coachworks	SNOQUALMIE		KING		SQG		WAD148435381		109604					
1001	PSE Snoqualmie Generation	SNOQUALMIE		KING		SQG		WAH000001552		111089					
1002	Becker Trucking Inc Tukwila	TUKWILA		KING		SQG		WAD988469003		108721					
1003	CMX Corp	TUKWILA		KING		SQG		WAR000001354		108965					
1004	Container Properties LLC	Tukwila		KING		SQG		WAD009282302		109012					
1005	Crown Cork & Seal Co Inc Plant 14	TUKWILA		KING		SQG		WAD081933673		109487					
1006	Federated Log Ops Tukwila	TUKWILA		KING		SQG		WAD05323416		110032					
1007	Kiddie Kandids 543	Tukwila		KING		SQG		WAD988519484		110750					
1008	Lowes HIW 010	TUKWILA		KING		SQG		WAD988511200		111896					
1009	NC Power System Co North Br	TUKWILA		KING		SQG		WAD042554865		111912					
1010	Nordstrom Visual Merchandising No	TUKWILA		KING		SQG		WAD988475034		111311					
1011	Penske Truck Leasing Co LP	TUKWILA		KING		SQG		WAD102860673		111622					
1012	Printing Control Graphics	TUKWILA		KING		SQG		WAD988491627		112187					
1013	Rainier Industries Ltd	Tukwila		KING		SQG		WAH000033320		112300					

**Businesses Generating Hazardous Waste in King County as of August 2009**

	A		B	C	D	E	F	H	I
	NAME		NAME	NAME	NAME	NAME	NAME		
1015			TUKWILA	KING	SQG	WAD009488495	111958		
1016	Red Dot Corp		TUKWILA	KING	SQG	WAR00005751	112354		
1017	Sears Unit 1139		TUKWILA	KING	SQG	WAD988470456	112573		
1018	Shasta Beverages Inc		TUKWILA	KING	SQG	WAD060053071	112622		
1019	Southtowne Auto Rebuild Inc		Tukwila	KING	SQG	WAH000027995	112718		
1020	Target Store 0627		TUKWILA	KING	SQG	WAD027438910	113117		
1021	United Rentals NW Inc Tukwilla		WOODINVILLE	KING	SQG	WAD988515383	109682		
1022	Arco 5481		WOODINVILLE	KING	SQG	WAH000005066	110450		
1023	Cardinal Industrial Finishes		WOODINVILLE	KING	SQG	WAH000008367	110965		
1024	Coit Services Seattle Division		WOODINVILLE	KING	SQG	WAD980738157	111053		
1025	Formost Packaging Machines Inc		WOODINVILLE	KING	SQG	WAH000008821	111593		
1026	Rite Aid 5205		WOODINVILLE	KING	SQG	WAH000003608	112585		
1027	Strasser Woodenworks		Woodinville	KING	SQG	WAH000026743	112908		
1028	Target Store 1118		WOODINVILLE	KING	SQG	WAD988495776	106892		
1029	TECT Aerospace Woodinville		WOODINVILLE	KING	SQG				

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Transporters Reported Used by King County Generators in 2008 Annual Reports

A	B	C	D	E	F	G	H	I	J	K
Report ing Year	Loc County NM	Transporter ID	Transporter Name	Transporter Address	Transporter City	Trans- porter State	Trans- porter Zip	Generator Flag	TSD_ Flag	Trans- porter Flag
1	2008	KING	AKD002848372	WEAVER BROTHERS, INC.	1611 E. 1st Avenue	AK	99501	FALSE	FALSE	TRUE
2	2008	KING	AKD003845526	NORTHERN AIR CARGO	3900 W. INT'L Airport Road	AK	99502	FALSE	FALSE	TRUE
3	2008	KING	AKD009504457	LYNDEN TRANSPORT, INC.	3027 Rampart Drive	AK	99507	TRUE	FALSE	TRUE
4	2008	KING	AKD980665061	NANA LYNDEN LOGISTICS	6441 South Airport Place	AK	99502	FALSE	FALSE	TRUE
5	2008	KING	AKD981767403	ALASKA RAILROAD CORPORATION	327 W. Ship Creek Avenue	AK	99501	TRUE	FALSE	TRUE
6	2008	KING	AKD983066390	TECK COMINCO ALASKA INC	Red Dog Mine	AK	99752	TRUE	FALSE	TRUE
7	2008	KING	AKD983068602	Burlington Environmental, LLC.	1813 E. 1st Ave, Ste. 101	AK	99501	TRUE	FALSE	TRUE
8	2008	KING	AKD983068727	NORTHERN AIR CARGO	3488 W Int'l Airport Rd	AK	99502	TRUE	FALSE	TRUE
9	2008	KING	AKD983069550	ALASKA WEST EXPRESS	1095 SANDURI ROAD	AK	99701	TRUE	FALSE	TRUE
10	2008	KING	AKR00000935	CLEARWATER ENVIRONMENTAL, INC.	ANCHORAGE	AK	ANCHORAGE	FALSE	FALSE	TRUE
11	2008	KING	AKR00003954	ALCHEMIST TRANSPORT INC.	23720 72nd Ave	BC	V3A 4P9	FALSE	FALSE	TRUE
12	2008	KING	AKR000005611	CARLILE TRANSPORTATION SYSTEMS	1800 EAST FIRST AVENUE	AK	99501	FALSE	FALSE	TRUE
13	2008	KING	AKR000200220	CONOCO PHILLIPS ALASKA INC.	500 AIRPORT ROAD	AK	99734	TRUE	FALSE	TRUE
14	2008	KING	ALD067138891	ROBBIE D WOOD INC	1051 Old Warrior River Rd	AL	35061	FALSE	FALSE	TRUE
15	2008	KING	ARD069748192	CLEAN HARBORS EL DORADO LLC	309 AMERICAN CIRCLE	AR	71730	FALSE	TRUE	TRUE
16	2008	KING	ARD069748192	TERIS LLC (DBA Clean Harbors)	309 AMERICAN CIRCLE	AR	71730	FALSE	TRUE	TRUE
17	2008	KING	ARD981057870	RINECO	1007 VULCAN RD - HASKELL	AR	72018	FALSE	TRUE	TRUE
18	2008	KING	ARD983278078	ENVIRONMENTAL SAFETY, INC.	P.O. BOX 1286	AR	75504	FALSE	FALSE	TRUE
19	2008	KING	AZ0000337360	VEOLIA ES TECHNICAL SOLUTIONS.	5736 W. JEFFERSON ST.	AZ	85043	TRUE	TRUE	TRUE
20	2008	KING	AZD983476680	LIGHTING RESOURCES INC	1522 E VICTORY ST STE 2	AZ	85040	FALSE	TRUE	TRUE
21	2008	KING	AZR000035717	DIVERSIFIED TRANSPORTATION INC	6208 S 75TH AVE UNIT 2	AZ	85339	FALSE	FALSE	TRUE
22	2008	KING	AZR000502567	RHO CHEM LLC	2003 W. MCDOWELL RD.	AZ	85009	TRUE	FALSE	TRUE
23	2008	KING	CA4890008986	Philip West Industrial Services	2003 W McDowell Rd	AZ	85009	FALSE	FALSE	TRUE
24	2008	KING	CAD006912620	LAWRENCE BERKELEY NATIONAL	One Cyclotron Road, MS 85	CA	94720	TRUE	FALSE	TRUE
25	2008	KING	CAD0063547996	Matson Navigation Company	P. O. BOX 7452	CA	94120	TRUE	FALSE	TRUE
26	2008	KING	CAD008252405	PACIFIC COAST LACQUER	3150 E. PICO BLVD	CA	90023	TRUE	FALSE	TRUE
27	2008	KING	CAD008364432	RHO-CHEM LLC	425 ISIS AVE	CA	90301	TRUE	TRUE	TRUE
28	2008	KING	CAD020210407	UNIVERSITY OF CA. SAN DIEGO	9500 GILMAN DRIVE	CA	92093	TRUE	TRUE	TRUE
29	2008	KING	CAD047120084	UC DAVIS-ENVIRONMENTAL	2201 Environmental Services Ln	CA	95616	TRUE	FALSE	TRUE
30	2008	KING	CAD063547996	Philip Transportation And Remediation In	12475 LLAGAS AVE	CA	95046	FALSE	FALSE	TRUE
31	2008	KING	CAD066151648	GRAY THOMAS & ASSOC	1205 W BARKLEY AVE	CA	92868	FALSE	FALSE	TRUE
32	2008	KING	CAD072953771	UNITED PUMPING	14000 E. VALLEY BLVD.	CA	91746	TRUE	FALSE	TRUE
33	2008	KING	CAD082699562	NRC Environmental Services	20500 Richmond Beach Dr.	WA	98177	FALSE	FALSE	TRUE
34	2008	KING	CAD980584510	PSC SM TRANS & REMEDIATION	PO BOX 150	CA	95046	TRUE	FALSE	TRUE
35	2008	KING	CAD980584692	UNIVERSITY OF CA, BERKELEY	317 University Hall, 3rd Floor	CA	94720	TRUE	TRUE	TRUE
36	2008	KING	CAD980585293	INDUSTRIAL WASTE UTILIZATION	5601 STATE ST	CA	91763	TRUE	FALSE	TRUE
37	2008	KING	CAD980884183	General Env Mgmt of Rancho Cordova LLC	11855 WHITE ROCK ROAD	CA	95742	FALSE	TRUE	TRUE
38	2008	KING	CAD981402407	A&S Metal Recycling, Inc.	2261 E. 15th Street	CA	90021	TRUE	FALSE	TRUE
39	2008	KING	CAD981634116	RUST AND SONS TRUCKING	15260 WILLOW RD	CA	92040	FALSE	FALSE	TRUE
40	2008	KING	CAD982030173	Ecology Control Industries	19500 NORMANDIE AVE	CA	90502	TRUE	FALSE	TRUE
41	2008	KING	CAD982413262	EVERGREEN ENVIRONMENTAL SER	6880 Smith Ave	CA	93706	TRUE	TRUE	TRUE
42	2008	KING	CAD982439879	A & S Environmental Recovery,	2261 E. 15th St.	CA	90021	FALSE	FALSE	TRUE
43	2008	KING	CAD982440364	PFR ENVIRONMENTAL SERVICES INC	14266 DALEWOOD ST	CA	91706	TRUE	FALSE	TRUE
44	2008	KING	CAD982463994	CHEMICAL TRANSFER COMPANY	5753 NE 92nd Drive	OR	97220	TRUE	FALSE	TRUE
45	2008	KING	CAD982479879	A & S ENVIRONMENTAL RECOVERY	LOS ANGELES	CA	90021	FALSE	FALSE	TRUE
46	2008	KING	CAD982492399	ALL CHEMICAL DISPOSAL, INC	SAN JOSE	CA	95133	TRUE	FALSE	TRUE
47	2008	KING	CAD982513699	Environmental Dynamics Inc.	22222 S. Wilmington Ave.	CA	90745	FALSE	FALSE	TRUE
48	2008	KING	CAD982523433	DILLARD ENVIRONMENTAL SERVICES	3120 CAMINO DIABLO	CA	94514	FALSE	FALSE	TRUE



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1										
50	2008	KING	CAD983608258	OCEAN BLUE ENVIRONMENTAL	12801 RAGOON STREET	CA	91331	FALSE	FALSE	TRUE
51	2008	KING	CAD983613688	MILES CHEMICAL	11155 JERSEY BLVD	CA	91730	TRUE	FALSE	TRUE
52	2008	KING	CAD983649880	General Environmental Management Inc	3191 TEMPLE AVE, STE 250	CA	91768	FALSE	FALSE	TRUE
53	2008	KING	CAD983649880	General Environmental Management Inc	1898 PARK RD	CA	94510	FALSE	FALSE	TRUE
54	2008	KING	CAD983652272	UNIVERSAL ENVIRONMENTAL INC	1605 ferry point	CA	94501	FALSE	FALSE	TRUE
55	2008	KING	CAR000030114	NRC ENVIRONMENTAL SERVICES		CA		FALSE	FALSE	TRUE
56	2008	KING	CAR000047613	Cal West Environmental Svcs		CA		FALSE	FALSE	TRUE
57	2008	KING	CAR000053405	ISLAND ENVIRONMENTAL SERVICES	3359 POMONA BLVD.	CA	91769	FALSE	FALSE	TRUE
58	2008	KING	CAR000084145	PHILIP WEST INDUSTRIAL	395 West Channel Road	CA	94510	TRUE	FALSE	TRUE
59	2008	KING	CAR00011583	S O S ECOLOGY MANAGEMENT INC	201 E Gardena Blvd Ste A	CA	90248	TRUE	FALSE	TRUE
60	2008	KING	CAR000156125	LIGHTING RESOURCES INC	805 FRANCIS ST	CA	91761	FALSE	FALSE	TRUE
61	2008	KING	CAR000159665	PARC SPECIALTY CONTRACTORS	1400 Vinci Ave	CA	95838	TRUE	FALSE	TRUE
62	2008	KING	CAR000164012	21st Century Environmental Management	535 GETTY COURT SUITE H	CA	94510	TRUE	FALSE	TRUE
63	2008	KING	CAR000164616	MAJOR CLEAN UP		CA		FALSE	FALSE	TRUE
64	2008	KING	CAR000164749	PARC SERVICES, INC.	253 RICKENBACKER CIR#B	CA		FALSE	FALSE	TRUE
65	2008	KING	CAR000172189	AMBERWICK CORPORATION	2304 W. 16TH STREET	CA	90813	TRUE	FALSE	TRUE
66	2008	KING	CAR000172460	Environmental Logistics, Inc	180 W. Monte Ave	CA	92376	FALSE	FALSE	TRUE
67	2008	KING	CAR000176826	HCI ENVIRONMENTAL & ENGINEER		CA	92880	FALSE	FALSE	TRUE
68	2008	KING	CAR000177527	Philip West Industrial Services	12475 Llagas Ave	CA	95046	FALSE	FALSE	TRUE
69	2008	KING	CAR000177527	PHILIP WEST INDUSTRIAL SERVICES	1802 SHELTON DRIVE	CA	95023	TRUE	FALSE	TRUE
70	2008	KING	CAR000177527	PSC Industrial Outsourcing LP DBA Philip	1802 SHELTON DRIVE	CA	95023	FALSE	FALSE	TRUE
71	2008	KING	CAR000177576	DOUBLE BARREL ENVIRONMENTAL SER	1710 Palmyrita Ave. Unit 7	CA	92507	FALSE	FALSE	TRUE
72	2008	KING	CAR000187922	Rust & Sons Trucking	15260 Willow Rd	CA	92040	FALSE	FALSE	TRUE
73	2008	KING	CAR000190355	Philip West Industrial Services	10212 Beech Street	CA	92336	FALSE	FALSE	TRUE
74	2008	KING	CAR080032253	O.C. Vacuum, Inc.		CA		FALSE	FALSE	TRUE
75	2008	KING	CAT000624247	M/P ENVIRONMENTAL SVCS INC	3400 MANOR ST	CA	93308	FALSE	FALSE	TRUE
76	2008	KING	CAT0800013428	MORGAN ENVIRONMENTAL SERVICES	1091 Calcot PI	CA	64607	TRUE	FALSE	TRUE
77	2008	KING	CAT0800032253	O.C. VACCUUM & CORP TRANSPORT	5900 Cherry Ave.	CA	90805	FALSE	FALSE	TRUE
78	2008	KING	CAT982507154	PARC ENVIRONMENTAL	2706 S. Rail Road Avenue	CA	93725	TRUE	TRUE	TRUE
79	2008	KING	COD004775474	21ST Century Environmental Management	2045 WEST UNION AVENUE	CO	80110	TRUE	TRUE	TRUE
80	2008	KING	GUR000078691	V. ANGOCOS TRUCKING CO.		GU		FALSE	FALSE	TRUE
81	2008	KING	GUR000087080	South Pacific Environmental	178 cw harmon Industrial Park	GU	96912	TRUE	FALSE	TRUE
82	2008	KING	HI0000076851	RHS LEE INC.	96-1414 WAIHONA PLACE	HI	96782	TRUE	FALSE	TRUE
83	2008	KING	HI6170024719	PACIFIC MISSILE RANGE FACILITY	P.O. BOX 128	HI	96752	TRUE	FALSE	TRUE
84	2008	KING	HI8690390036	U.S. COAST GUARD HONOLULU	400 Sand Island Parkway	HI	96819	TRUE	FALSE	TRUE
85	2008	KING	HID049977085	KUWAYE TRUCKING, INC.	2055 Kamehameha Avenue	HI	96720	FALSE	FALSE	TRUE
86	2008	KING	HID9808080884	PHILIP SERVICES HAWAII LTD	91-127 MALAKOLE ST.	HI	96707	TRUE	FALSE	TRUE
87	2008	KING	HID982041402	Philip Services Hawaii, Ltd.	91-410 Komohana Street	HI	96707	TRUE	TRUE	TRUE
88	2008	KING	HID984467530	Pacific Environ. PENCO	65 N Nimitz Hwy, Pier 14	HI	96817	TRUE	FALSE	TRUE
89	2008	KING	HIR000001099	PINERIDGE FARMS	611 MIDDLE ST	HI	96819	TRUE	FALSE	TRUE
90	2008	KING	HIR0000041913	KAUAI VETERANS EXPRESS CO. LTD.	PO BOX 662098	HI	96766	FALSE	FALSE	TRUE
91	2008	KING	HIR0000050336	Haztech Environmental Services	94-110A Leokane Street	HI	96797	TRUE	FALSE	TRUE
92	2008	KING	HIR0000056010	ISLAND MOVERS INC - MAUI	181 ALAMAHA ST	HI	96732	FALSE	FALSE	TRUE
93	2008	KING	HIR000060046	YOUNG BROTHERS	1331 N NIMITZ HIGHWAY	HI	96817	TRUE	FALSE	TRUE
94	2008	KING	HIR000074492	KAHULUI TRUCKING AND STORAGE	140 HOBRON AVE	HI	96732	TRUE	FALSE	TRUE
95	2008	KING	HIR000097717	BURLINGTON ENVIRONMENTAL, LLC	5 Sand Island Access Road	HI	96819	TRUE	FALSE	TRUE
96	2008	KING	HIR000115089	BEARING SEA ECCOTECH	91-343 Kaihola Street	HI	96707	TRUE	FALSE	TRUE
97	2008	KING	HIR000137109	PHILIP SERVICES HAWAII	456 KALANIANA'OLE AVE	HI	96720	TRUE	FALSE	TRUE

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98	2008	KING	HIR000137935	ENVIROSERVICES & TRAINING CTR	560 N NIMITZ HIGHWAY	HI	96817	FALSE	FALSE	TRUE
99	2008	KING	IDR000002063	SPECIALTY ENVIRON SVCS, INC	119 E 44TH ST	ID	83714	FALSE	FALSE	TRUE
100	2008	KING	IDR000002063	Specialty Environmental Services, Inc.	110 E. 39th Street	ID	83714	FALSE	FALSE	TRUE
101	2008	KING	IDR000201608	Environmental Management Serv	701 N RALSTIN ST	ID	83642	TRUE	FALSE	TRUE
102	2008	KING	IL0000644310	Chicago Rail Link	2728 E 104th St	IL	60617	FALSE	FALSE	TRUE
103	2008	KING	ILD006493191	Schiber Truck Co., Inc.	1701 S. Delmar	IL	62048	FALSE	FALSE	TRUE
104	2008	KING	ILD981957236	SET Environmental	450 Sumac Road	IL	60090	FALSE	FALSE	TRUE
105	2008	KING	ILR000118190	INTER-RAIL SYSTEMS, INC.	P O BOX 526	MO	63702	FALSE	FALSE	TRUE
106	2008	KING	IND000646943	POLLUTION CONTROL INDUSTRIES INC	4343 KENNEDY AVE	IN	46312	FALSE	TRUE	TRUE
107	2008	KING	IND058484114	HERITAGE TRANSPORT LLC	1626 RESEARCH WAY	IN	46231	FALSE	FALSE	TRUE
108	2008	KING	IND058484114	HERITAGE TRANSPORT LLC	7901 West Morris Street	IN	46231	FALSE	FALSE	TRUE
109	2008	KING	KS0000336891	SAVANNAH TRANSP INC	4490 NW 17TH	KS	66618	FALSE	FALSE	TRUE
110	2008	KING	KS0000336891	Savannah Transport	3454 West 6800 South	UT	84088	FALSE	FALSE	TRUE
111	2008	KING	KS0000336891	SAVANNAH TRANSPORT	4490 NW HWY 24	KS	66618	FALSE	FALSE	TRUE
112	2008	KING	KS0000336891	Savannah Transport Inc.	4425 NW Hwy 24	KS	66618	FALSE	FALSE	TRUE
113	2008	KING	KSD980633259	SYSTECH ENVIRONMENTAL CORP	1420 S CEMENT RD	KS	66736	FALSE	TRUE	TRUE
114	2008	KING	KSD981506025	CLEAN HARBORS	HWY. 169 N/P.O. BOX 1328	KS	67337	FALSE	TRUE	TRUE
115	2008	KING	KSO000336891	SAVANNAH TRANSPORT, INC.	3454 W 8600 S	UT	84088	FALSE	FALSE	TRUE
116	2008	KING	MAD039322250	CLEAN HARBORS ENVIR. SRVCS.	1200 Crown Colony Drive	MA	02164	FALSE	FALSE	TRUE
117	2008	KING	MAD039322250	Clean Harbors Environmental Services	1501 Washington St	MD	02184	FALSE	FALSE	TRUE
118	2008	KING	MAD039322250	Clean Harbors Environmental Services	42 Longwater Drive	MA	02061	FALSE	FALSE	TRUE
119	2008	KING	MAD039322250	Clean Harbors Environmental Services Inc	100 JOSEPH ST	MA	02364	FALSE	TRUE	TRUE
120	2008	KING	MAD039322250	Clean Harbors Environmental Services Inc	19320 Des Moines Memorial Dr.,			FALSE	FALSE	TRUE
121	2008	KING	MDR000505347	Delmarva Power Lynch Substation	Bldg. D	WA	98148	FALSE	FALSE	TRUE
122	2008	KING	MID021087275	NORTRU, LLC	RT 561	MD	21646	FALSE	FALSE	TRUE
123	2008	KING	MND048341788	BNSF	11700 Freud	MI	48214	TRUE	TRUE	TRUE
124	2008	KING	MND048341788	BNSF Railroad CO - St Paul	999 3rd Avenue	WA	98104	FALSE	FALSE	TRUE
125	2008	KING	MOD006965859	KANSAS CITY SOUTHERN RAILWAY CO	176 5th StE Ste 110	MN	55101	FALSE	FALSE	TRUE
126	2008	KING	MOD095038998	BED ROCK INC DBA TRI STATE MOTOR	114 W 11TH ST	MO	64105	FALSE	FALSE	TRUE
127	2008	KING	MOR981123391	WASTE EXPRESS	8141 E 7TH ST	MO	64801	FALSE	FALSE	TRUE
128	2008	KING	MOR000041764	Semo Port Railroad	6300 STADIUM DRIVE	MO	64129	TRUE	TRUE	TRUE
129	2008	KING	MTR000006676	Olympus Technical Service	10 Bill Best Drive	MO	63780	FALSE	FALSE	TRUE
130	2008	KING	NED001792910	UNION PACIFIC RAILROAD CO.	1416 DODGE STREET	MT		FALSE	FALSE	TRUE
131	2008	KING	NED001792910	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS STREET	NE	68179	FALSE	FALSE	TRUE
132	2008	KING	NED981723513	Clean Harbors Environmental Services Inc	2247 South Highway 71	NE	68145	FALSE	TRUE	TRUE
133	2008	KING	NED986382133	Smith Systems Transportation Inc	417 9TH AVENUE	NE	69361	FALSE	FALSE	TRUE
134	2008	KING	NJD080631369	VEOLIA ENVIRONMENTAL SERVICE LLC	1 EDEN LN	NJ	07836	FALSE	FALSE	TRUE
135	2008	KING	NJD080631369	Veolia ES Technical Solutions	9131 East 96th Ave.	CO	80640	FALSE	TRUE	TRUE
136	2008	KING	NJD080631369	VEOLIA ES TECHNICAL SOLUTIONS LLC	3 GOLD MINE ROAD	NJ	07836	FALSE	FALSE	TRUE
137	2008	KING	NJD986607380	MAUMEE EXPRESS INC	50 Howard St Cloverleaf Ind Pk	NJ	08854	FALSE	FALSE	TRUE
138	2008	KING	NVD980895338	21st Century Environmental Management	2095 NEWLANDS DR E	NV	89408	TRUE	TRUE	TRUE
139	2008	KING	OHD009865825	Dart Trucking Company, Inc.	11425 Exective	ID	83704	FALSE	FALSE	TRUE
140	2008	KING	OKD007222128	AMEREX	1105 N PEORIA	OK	74120	FALSE	FALSE	TRUE
141	2008	KING	OKD007222128	MOORE LEE C CORPORATION	1105 N PEORIA	OK	74120	FALSE	FALSE	TRUE
142	2008	KING	OKD981588791	TRIAD TRANSPORT INC.	1630 DIESEL AVE	OK	74501	FALSE	FALSE	TRUE
143	2008	KING	ORD000006221	WASTEWATCH, LLC.	592 SE 42ND CIRCL	OR	97060	FALSE	FALSE	TRUE
144	2008	KING	ORD009227398	Univar USA, Inc.	3950 NW Yeon Avenue	OR	97210	FALSE	FALSE	TRUE

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145	2008	KING	ORD089452353	Chem Waste Mgt of Northwest	17629 Cedar Springs Lane	Arlington	OR	97812	FALSE	TRUE	TRUE
146	2008	KING	ORD980987648	SALEM FMS	1025 AIRPORT ROAD	SALEM	OR	97301	TRUE	FALSE	TRUE
147	2008	KING	ORD980987697	PORTLAND FMS	10000 NE 33RD DRIVE	PORTLAND	OR	97211	TRUE	FALSE	TRUE
148	2008	KING	ORD980987705	CENTRAL OREGON UTES	2899 E Hwy-126 PO Box 370	REDMOND	OR	97756	TRUE	FALSE	TRUE
149	2008	KING	ORD980987713	MEDFORD FMS	1701 S. PACIFIC HWY.	MEDFORD	OR	97501	TRUE	FALSE	TRUE
150	2008	KING	ORD980987762	MAISON ARMORY	6700 SW OAK ST	TIGARD	OR	97223	TRUE	FALSE	TRUE
151	2008	KING	ORD980988356	CAMP WITHYCOMBE	10101 S.E. CLACKAMAS RD.	CLACKAMAS	OR	97215	TRUE	FALSE	TRUE
152	2008	KING	ORD980988414	CAMP RILEA	91426 Rilea McCarter Road	WARRENTON	OR	97146	TRUE	TRUE	TRUE
153	2008	KING	ORD981766124	Safety Klean Systems Inc	16540 SE 130th AVE bldg B	Clackamas	OR	97015	FALSE	TRUE	TRUE
154	2008	KING	ORD98173457	COLUMBIA RIDGE LDFL & RECYCLIN	18177 CEDAR SPRING LN	ARLINGTON	OR	97812	FALSE	FALSE	TRUE
155	2008	KING	ORD987189016	METRO-PORTLAND(HHW/CEG) SOUTH	2001 Washington Street	OREGON CITY	OR	97045	TRUE	FALSE	TRUE
156	2008	KING	ORP936004031	Eastern Oregon Environmental Recovery			OR		FALSE	FALSE	TRUE
157	2008	KING	ORQ000004952	RICK FRANKLIN	101 INDUSTRIAL WAY	LEBANON	OR	97355	TRUE	FALSE	TRUE
158	2008	KING	ORQ000007773	FIRST STRIKE ENVIRONMENTAL		ROSEBURG	OR		FALSE	FALSE	TRUE
159	2008	KING	ORQ000008003	BELFOR ENVIRONMENTAL	(FORMERLY RMCAT)		WA		FALSE	FALSE	TRUE
160	2008	KING	ORQ000011668	RIVERSIDE TRANSPORT SERVICE	P.O. BOX 95	Arlington	OR	97812	FALSE	FALSE	TRUE
161	2008	KING	ORQ000018200	Clearwater Environmental Services	30240 SW Parkway Ave Ste 3	WILSONVILLE	OR	97070	FALSE	FALSE	TRUE
162	2008	KING	ORQ000020644	NRC ENVIRONMENTAL SERVICES	6211 N ENSIGN ST	PORTLAND	OR	97217	FALSE	FALSE	TRUE
163	2008	KING	ORQ000025197	THERMO FLUIDS	12533 SE CARPENTER DR	CLACKAMAS	OR	97015	TRUE	TRUE	TRUE
164	2008	KING	TTD982513392	saipan shipping company	Charlie Dock Puerto Rico	Saipan	MP	96950	FALSE	FALSE	TRUE
165	2008	KING	TXD077603371	SAFETY-KLEEN SYSTEMS INC	1722 Cooper Creek Rd	Denton	TX	76208	FALSE	TRUE	TRUE
166	2008	KING	TXD982290140	CLEAN HARBORS LAPORTE LP	500 BATTLEGROUND RD	LA PORTE	TX	77571	FALSE	TRUE	TRUE
167	2008	KING	TXR000025072	ROCKETLINE CARRIER SERVICES	2563 TRAWOOD DRIVE	EL PASO	TX	79936	FALSE	FALSE	TRUE
168	2008	KING	TXR000025072	ROCKETLINE CARRIER SERVICES LLC	425 N AMERICAS AVE	EL PASO	TX	79907	FALSE	FALSE	TRUE
169	2008	KING	TXR000050930	SAFETY-KLEEN SYSTEMS INC	5360 Legacy Dr Bldg 2, Ste 100	PLANO	TX	75024	FALSE	FALSE	TRUE
170	2008	KING	TXR0000051466	SLATE			TX		FALSE	FALSE	TRUE
171	2008	KING	UTD981552177	CLEAN HARBORS ARAGONITE LLC	11600 North Aptus Road	ARAGONITE	UT	84029	FALSE	TRUE	TRUE
172	2008	KING	UTD981552425	SLT EXPRESS	176 WEST CENTRAL AVE	MURRAY	UT	84107	FALSE	FALSE	TRUE
173	2008	KING	UTD988074274	PHILIP PLANT SERVICES	2525 S. 1100 W.	WOODS CROSS	UT	84087	FALSE	TRUE	TRUE
174	2008	KING	UTD9880074712	TW Company	505 North Main Street	N. Salt Lake City	UT	84054	FALSE	FALSE	TRUE
175	2008	KING	UTR000007708	SLT EXPRESS WAY INC.	176 West Central Avenue Ste #1	MURRY	UT	84017	FALSE	FALSE	TRUE
176	2008	KING	UTR000007708	SLT EXPRESS WAY INC.	4255 South 300 West Ste B	MURRY	UT	84017	FALSE	FALSE	TRUE
177	2008	KING	UTR000007708	SLT EXPRESSWAY INC.	325 N. AVONDALE BLVD.	AVONDALE	AZ	85323	FALSE	FALSE	TRUE
178	2008	KING	WA0000137455	ALEXANDER GOW FIRE EQUIPMENT	456 NORTH 35TH STREET	SEATTLE	WA	98103	TRUE	FALSE	TRUE
179	2008	KING	WA5170027291	Command Navy Region North West	7001 Finback Circle, Rm E300	SILVERDALE	WA	98315	TRUE	FALSE	TRUE
180	2008	KING	WA7890008967	US DEPT ENERGY - WTP-200 AREA	2355 STEVENS DRIVE	RICHLAND	WA	99352	TRUE	FALSE	TRUE
181	2008	KING	WAD000001743	Burlington Environmental, Inc.	20245 77th Avenue South	Kent	WA	98032	FALSE	FALSE	TRUE
182	2008	KING	WAD000712042	Safety Klean Systems Lynnwood 709201	6303 212TH ST SW STE C	LYNNWOOD	WA	98036	FALSE	FALSE	TRUE
183	2008	KING	WAD000712059	Safety Klean Systems Auburn 118101	3210 C ST NE UNIT G	AUBURN	WA	98002	FALSE	FALSE	TRUE
184	2008	KING	WAD0002788347	OAK HARBOR FREIGHT LINES	1225 37TH STREET NW	AUBURN	WA	98071	TRUE	FALSE	TRUE
185	2008	KING	WAD002799260	LYNDEN TRANSPORT, INC.	5410 12th St. East	Kent	WA	98424	TRUE	FALSE	TRUE
186	2008	KING	WAD0008958027	Crowley Maritime	PO Box 2287	Seattle	WA	98136	FALSE	FALSE	TRUE
187	2008	KING	WAD020257945	Burlington Environmental Inc Tacoma	1701 E ALEXANDER AVE	TACOMA	WA	98421	FALSE	TRUE	TRUE
188	2008	KING	WAD027528728	FM&A, LLC	4110 EAST 11TH STREET	TACOMA	WA	98421	TRUE	FALSE	TRUE
189	2008	KING	WAD040703514	SONICO INC	6998 26th Ave NE, Bldg 408	MOSES LAKE	WA	98837	TRUE	FALSE	TRUE
190	2008	KING	WAD058364647	EMERALD SERVICES	1825 ALEXANDER AVE	TACOMA	WA	98421	FALSE	FALSE	TRUE
191	2008	KING	WAD058364647	EMERALD SERVICES INC	7343 E MARGINAL WAY S	SEATTLE	WA	98103	FALSE	FALSE	TRUE
192	2008	KING	WAD058364647	EMERALD SERVICES INC	7343 E MARGINAL WAY S	SEATTLE	WA	98108	FALSE	FALSE	TRUE

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193	2008	KING	WAD058364647	EMERALD SERVICES, INC.	9010 East Marginal Way South	SEATTLE	WA	98108	FALSE	TRUE
194	2008	KING	WAD058367152	EMERALD RECYCLING	1500 AIRPORT WY S	SEATTLE	WA	98134	FALSE	TRUE
195	2008	KING	WAD061672812	RESOURCE RECOVERY	1629 East Alexander Ave	TACOMA	WA	98421	FALSE	TRUE
196	2008	KING	WAD067548966	UNIVAR USA INC.	8201 S. 212TH ST	KENT	WA	98032	FALSE	TRUE
197	2008	KING	WAD068794387	Emerald Services	1825 Alexander Ave	Tacoma	WA	98421	FALSE	TRUE
198	2008	KING	WAD070397955	Totem Ocean Trailer Exorress In	500 East Alexander Ave	TACOMA	WA	98421	TRUE	TRUE
199	2008	KING	WAD083732537	KEEP IT CLEAN RECYCLING	P.O.BOX 2905	REDMOND	WA	98073	FALSE	TRUE
200	2008	KING	WAD980974521	MARINE VACUUM SERVICE INC	1516 S GRAHAM ST	SEATTLE	WA	98108	FALSE	TRUE
201	2008	KING	WAD980976906	HALLMARK REFINING CORP	1016 DALE LANE	MOUNT VERNON	WA	98273	FALSE	TRUE
202	2008	KING	WAD980979538	Chem-Safe Services, Inc.	P.O. Box 616	Kittitas	WA	98934	TRUE	TRUE
203	2008	KING	WAD980981849	SAMSON TUG & BARGE	7400 8th Avenue South	Seattle	WA	98108	TRUE	TRUE
204	2008	KING	WAD980986244	ELAN PAINTING, INC	2611 N. PEARL ST	CENTRALIA	WA	98531	TRUE	TRUE
205	2008	KING	WAD981769110	Emerald Services Inc Alexander Ave	1825 ALEXANDER AVE	TACOMA	WA	98421	FALSE	TRUE
206	2008	KING	WAD981772957	ART BRASS PLATING	5516 3RD AVE SOUTH	SEATTLE	WA	98108	TRUE	TRUE
207	2008	KING	WAD981773005	NORTHLAND SERVICES, INC.	6700 W. Marginal Way SW	Seattle	WA	98106	TRUE	TRUE
208	2008	KING	WAD988467080	TACOMA PUBLIC UTILITIES	2601 N Frontage Rd @ SR 509	TACOMA	WA	98421	TRUE	TRUE
209	2008	KING	WAD988472791	FBN ENTERPRISES	PO BOX 6488	BELLEVUE	WA	98008	TRUE	TRUE
210	2008	KING	WAD988472791	FBN ENTERPRISES INC	10221 NE 134th LN Ste F104	KIRKLAND	WA	98034	FALSE	TRUE
211	2008	KING	WAD988472791	FBN Enterprises, Inc.	16220 N.E. 6th St.	Bellevue	WA	98008	FALSE	TRUE
212	2008	KING	WAD988475323	Thermo Fluids	1710 fryar ave suite 109	SUMNER	WA	98390	TRUE	TRUE
213	2008	KING	WAD988499257	SOUND PUBLISHING	7689 DAY ROAD	Bainbridge Island	WA	98110	TRUE	TRUE
214	2008	KING	WAD988503314	BLUE SKY WOODWORKS	8040 DAY ROAD	Bainbridge Island	WA	98110	TRUE	TRUE
215	2008	KING	WAD988512836	PREMIER PACIFIC SEAFOODS/	2001 W GARFIELD ST	SEATTLE	WA	98119	TRUE	TRUE
216	2008	KING	WAD988515995	NOR-PAC ENTERPRISES INC.	10015 19TH AVE EAST	TACOMA	WA	98445	FALSE	TRUE
217	2008	KING	WAD988516829	ENVIRO CON TRUCKING	29620 OLD 99	STANWOOD	WA	98292	FALSE	TRUE
218	2008	KING	WAD988516829	ENVIRO CON TRUCKING, INC.	PO BOX 740	MUKILTEO	WA	98275	FALSE	TRUE
219	2008	KING	WAD991281767	Burlington Environmental Inc Kent	20245 77TH AVE S	KENT	WA	98032	FALSE	TRUE
220	2008	KING	WAD991281767	NATIONAL SCIENCE FOUNDATION	Importer: Burlington Env., Inc	KENT	WA	98032	TRUE	TRUE
221	2008	KING	WAD991281809	ALASKA MARINE LINES	5615 W. MARGINAL WAY	SEATTLE	WA	98106	FALSE	TRUE
222	2008	KING	WAH000000497	PSC INDUSTRIAL OUTSOURCING INC	4430 PACIFIC HIGHWAY	BELLINGHAM	WA	98226	FALSE	TRUE
223	2008	KING	WAH000002261	TRUCK RAIL HANDLING, INC.	457 EAST 18TH STREET	TACOMA	WA	98421	TRUE	TRUE
224	2008	KING	WAH000004457	Kleen Environmental Technologies Inc	5995 West Marginal Way SW	SEATTLE	WA	98106	FALSE	TRUE
225	2008	KING	WAH000004457	Kleen Environmental Technologies Inc	754 GARFIELD ST	SEATTLE	WA	98109	FALSE	TRUE
226	2008	KING	WAH000004549	NRC ENVIRONMENTAL SVES INC	20500 Richmond Beach Dr NW	SEATTLE	WA	98177	FALSE	TRUE
227	2008	KING	WAH000005249	Western Refinery	2380 Grandview Drive	Ferndale	WA	98248	FALSE	TRUE
228	2008	KING	WAH000008169	chem-safe environmental, inc	999999	WA	WA	98248	FALSE	TRUE
229	2008	KING	WAH000008847	Clean Harbors Environmental Services Inc	117 Frontage Rd N Bldg D	PACIFIC	WA	98047	FALSE	TRUE
230	2008	KING	WAH000011486	NORTHLAND SERVICES	6700 West Marginal Way SW	SEATTLE	WA	98106	TRUE	TRUE
231	2008	KING	WAH000012450	ENVIROTECH SYSTEMS	7343 E Marginal Way South	SEATTLE	WA	98108	FALSE	TRUE
232	2008	KING	WAH000012450	ENVIROTECH SYSTEMS INC	3601 121ST ST SW	LYNNWOOD	WA	98037	FALSE	TRUE
233	2008	KING	WAH000012781	TRUCK RAIL HANDLING INC	457 E 18TH STREET	TACOMA	WA	98421	FALSE	TRUE
234	2008	KING	WAH000013441	ALASKA RAILBELT MARINE	1800 INTL' BLVD	SEATTLE	WA	98188	FALSE	TRUE
235	2008	KING	WAH000014944	Cowlitz Clean Sweep	55 International Way	Longview	WA	98632	FALSE	TRUE
236	2008	KING	WAH000014944	COWLITZ CLEAN SWEEP INC (CCS)	340 OREGON WAY	LONGVIEW	WA	98632	FALSE	TRUE
237	2008	KING	WAH000015545	THERMO FLUIDS- SPOKANE	WA	SPOKANE	WA	98632	FALSE	TRUE
238	2008	KING	WAH000016683	WEST COAST TRUCKING	3433 AIRPORT WAY S	SEATTLE	WA	98134	FALSE	TRUE
239	2008	KING	WAH000018747	CARLILE TRANSPORTATION SYSTEMS	35225 Enchanted Pkwy. S	SEATTLE	WA	98003	FALSE	TRUE
240	2008	KING	WAH000018838	ABLE CLEAN-UP TECHNOLOGIES, IC	WA	Federal Way	WA	98003	FALSE	TRUE

Transporters Reported Used by King County Generators in 2008 Annual Reports

A	B	C	D	E	F	G	H	I	J	K
Report ing Year	Loc County NM	Transporter ID	Transporter Name	Transporter Address	Transporter City	Trans- porter State	Trans- porter Zip	Generator Flag	TSD_ Flag	Trans- porter Flag
241	2008	KING	WASHINGTON MARINE CLEANING	3419 HAYES STREET	EVERETT	WA	98201	TRUE	FALSE	TRUE
242	2008	KING	NORWEST EXPRESS INC	733 E 11TH ST 2ND FLR	TACOMA	WA	98421	FALSE	FALSE	TRUE
243	2008	KING	ECOLIGHTS NORTHWEST	1915 S CORGIAT DR	SEATTLE	WA	98108	FALSE	TRUE	TRUE
244	2008	KING	Steve Forler Trucking	19827 150th Ave. East	Graham	WA	98360	FALSE	FALSE	TRUE
245	2008	KING	Steve Forler Trucking Co.	PO Box 1479	Orting	WA	98360	FALSE	FALSE	TRUE
246	2008	KING	Burlington Environmental, Inc	1701 East Alexander Ave	Tacoma	WA	98421	FALSE	FALSE	TRUE
247	2008	KING	Burlington Environmental, Inc	20245 77th Avenue South	Kent	WA	98032	FALSE	FALSE	TRUE
248	2008	KING	BURLINGTON ENVIRONMENTAL, LLC	1629 EAST ALEXANDER	TACOMA	WA	98421	TRUE	FALSE	TRUE
249	2008	KING	PHOENIX ENVIRONMENTAL SERVICES	2212 Port Of Tacoma Road	TACOMA	WA	98421	TRUE	FALSE	TRUE
250	2008	KING	CERTIFIED CLEANING SERVICES	2103 E. 112TH ST.	TACOMA	WA	98445	FALSE	FALSE	TRUE
251	2008	KING	MERCURY WASTE SOLUTIONS, LLC	21211 DURAND AVENUE	UNION GROVE	WI	53182	FALSE	TRUE	TRUE

Washington State Hazardous Waste Transporters  
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	A	C	D	E	F	G
	RCRA Site ID	Effective Date	Year	Common Name	Address	City
1	WAH000014944	12/31/2008	2008	US DOE BPA Ashe Maint HQ	0.5 HANFORD N OF WNP2	RICHLAND
2	WA2891420042	12/31/2008	2008	Energy Northwest Columbia Generating Sta	T11N R28E S5	RICHLAND
3	WAD980738488	8/31/2009		US Dept of Energy Hanford Facility	HANFORD FACILITY	RICHLAND
4	WA78900008967	12/31/2008	2008	Kennewick City	414 10TH AVE	KENNEWICK
5	WAD040187544	12/31/2008	2008	Savage Logistics LLC	2750 Salk Ave Ste 104	Richland
6	WAH000030673	12/31/2008	2008	Anges Composite Technologies Inc	2138 W 18TH ST	PORT ANGELES
7	WAH000004499	12/31/2008	2008	US DOE BPA Ross Complex	5411 NE HWY 99	VANCOUVER
8	WA1891406349	12/31/2008	2008	Sheri Lee DMD LLC	700 SE 160TH AVE	VANCOUVER
9	WAH000019141	12/31/2008	2008	West Coast Marine Cleaning Inc	3501 THOMPSON AVE	VANCOUVER
10	WAD988479440	12/31/2008	2008	Supreme Dry Cleaners	10501 NE HWY 99	VANCOUVER
11	WAD988507190	12/31/2008	2008	Slaby Environmental Inc	3517 NE 49th St	VANCOUVER
12	WAH000033981	11/6/2008		Jammies Environmental Inc	128 Industrial Way	Vancouver
13	WAH000022628	12/31/2008	2008	PSC Industrial Outsourcing LP Kelso	1806 Baker Way LP	Longview
14	WAD071816060	12/31/2008	2008	Cowlitz Clean Sweep Inc	55 INTERNATIONAL WAY	Kelso
15	WAD988467197	12/31/2007	2007	CCS	60 INTERNATIONAL WAY	LONGVIEW
16	WAH000014944	1/1/2009		Savage Transportation LLC	251 COMMERCIAL AVE	LONGVIEW
17	WAR000002691	12/31/2008	2008	US DOE BPA Pasco Maintenance HQ	3404 SWALLOW AVE	PASCO
18	WA7891490008	12/31/2008	2008	Safety Klean Systems Inc	814 E AINSWORTH	PASCO
19	WAD980978746	12/31/2008	2008	Burlington Environmental LLC Pasco	3725 Jason Ave	PASCO
20	WAH000026408	12/31/2008	2008	Farm & Home Supply	643 MAIN ST	Pasco
21	WAD009758772	12/31/2008	2008	Weyerhaeuser Sawmill Aberdeen	500 N CUSTER ST	POMEROY
22	WAD980383707	12/31/2008	2008	US NAVY Air Station Whidbey Island Ault	AULT FIELD BASE	ABERDEEN
23	WA9170023361	2/24/2009		South Whidbey School Dist 206	5675 S MAXWELTON RD	OAK HARBOR
24	WAD981770894	12/31/2008	2008	Enviro Con Trucking Inc	871 Good Rd	LANGLEY
25	WAD988516829	12/31/2008	2008	US NAVY Air Station Whidbey Island SPB	SEAPLANE BASE	Camano Island
26	WA6170090058	2/24/2009		Benaroya Research Institute at Virgini	1201 9TH AVE	OAK HARBOR
27	WAH000008300	12/31/2008	2008	Safety Klean Systems Inc Auburn 118101	3210 C ST NE UNIT G	SEATTLE
28	WAD000712059	12/31/2008	2008	Northland Services Inc	6700 W MARGINAL WAY SW S TERMINAL 115 TR	AUBURN
29	WAH000011486	12/31/2008	2008	Roadlink Transportation Solutions	3433 Airport Way S	SEATTLE
30	WAH000016683	12/31/2008	2008	Bellevue School Dist Sammamish High Scho	100 140TH AVE SE	Seattle
31	WAH000010728	12/31/2008	2008	Crowley Marine Services Inc	1100 SW MASSACHUSETTS ST	BELLEVUE
32	WAD008958027	12/31/2008	2008	Total Reclaim Inc	2200 6TH AVE S	SEATTLE
33	WAD009482803	2/24/2009		Bellevue School Dist Bellevue HS	10416 SE KILMARNOCK	SEATTLE
34	WAH000011049	12/31/2008	2008	Emerald Services Inc	7343 E MARGINAL WAY S	BELLEVUE
35	WAD058364647	12/31/2008	2008	Lucca Statuary Leary Way	3623 Leary Way NW	SEATTLE
36	WAR000008920	12/31/2008	2008	Aim Aviation	705 SW 7TH ST	Seattle
37	WAD060030657	2/27/2009		Veolia ES Technical Solutions LLC	21814 76th Ave S Transfer Facility	RENTON
38	WAH000026020	12/31/2008	2008	Ecolights Northwest	1915 S Corrigat Dr	Kent
39	WAH000026371	2/19/2009		GENERAL ENVIRONMENTAL MGMT	7821 S 198TH ST TRANSFER FACILITY	Seattle
40	WAH000028836	5/6/2009		Samson Tug & Barge Co Inc Transporter	6365 1st Ave S	KENT
41	WAH000029081	12/31/2008	2008	American Motor Freight LLC	5700 6th Ave S Ste 203	Seattle
42	WAH000034000	12/31/2008	2008	TERMINAL SERVICE	20462 84TH AVE S	KENT
43	WAH000034836	5/28/2009		AFYA House Inc	37682 18th Pl S	Federal Way
44	WAH000033620	9/9/2008		Univar USA Inc Kent	8201 S 212TH ST	KENT
45	WAD067548966	12/31/2008	2008	Bellevue School Dist Interlake HS	16245 NE 24TH	KENT
46	WAH000011056	12/31/2008	2008	Bellevue School Dist Newport HS	4333 FACTORIA BLVD SE	BELLEVUE
47	WAH000011684	12/31/2008	2008			BELLEVUE

Washington State Hazardous Waste Transporters  
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	H	I	J	K	L	M	N	O
	County	Zip Code	Transp_Own_Waste	Flinsp_Others_Waste	Transfer_Facility?	Gen_Status_CD	TSDR_Facility?	NAICS_Code
1			TRUE	FALSE	FALSE	SQG	FALSE	921190
2	BENTON	99362-9923	TRUE	FALSE	FALSE	SQG	FALSE	921190
3	BENTON	99352	TRUE	FALSE	FALSE	LQG	TRUE	221113
4	BENTON	99352	TRUE	FALSE	TRUE	LQG	TRUE	562211
5	BENTON	99336	TRUE	FALSE	FALSE	SQG	FALSE	22131
6	BENTON	99354	FALSE	TRUE	FALSE	XQG	FALSE	484220
7	CLALLAM	98363	TRUE	FALSE	FALSE	MOG	FALSE	336411
8	CLARK	98666	TRUE	FALSE	FALSE	LQG	TRUE	221111
9	CLARK	98684	TRUE	FALSE	FALSE	SQG	FALSE	62121
10	CLARK	98660	FALSE	TRUE	FALSE	XQG	FALSE	48839
11	CLARK	98686-5612	TRUE	FALSE	FALSE	SQG	FALSE	81232
12	CLARK	98661	FALSE	TRUE	TRUE	XQG	FALSE	56291
13	COWLITZ	98632	FALSE	TRUE	FALSE	XQG	FALSE	561790
14	COWLITZ	98626	TRUE	TRUE	FALSE	SQG	FALSE	238990
15	COWLITZ	98632	TRUE	TRUE	FALSE	SQG	FALSE	56291
16	COWLITZ	98632	TRUE	TRUE	FALSE	XQG	FALSE	56291
17	FRANKLIN	99301-9676	FALSE	TRUE	FALSE	XQG	FALSE	48411
18	FRANKLIN	99301	TRUE	FALSE	FALSE	SQG	FALSE	921190
19	FRANKLIN	99301	TRUE	TRUE	TRUE	SQG	FALSE	562112
20	FRANKLIN	99301	TRUE	TRUE	TRUE	XQG	FALSE	562112
21	GARFIELD	99347	TRUE	FALSE	FALSE	SQG	FALSE	42491
22	GRAYS HARBOR	98520	TRUE	FALSE	FALSE	SQG	FALSE	321113
23	ISLAND	98278	TRUE	FALSE	FALSE	LQG	FALSE	92811
24	ISLAND	98260	TRUE	FALSE	FALSE	SQG	FALSE	61111
25	ISLAND	98272	FALSE	TRUE	FALSE	XQG	FALSE	48422
26	ISLAND	98278-5000	TRUE	FALSE	FALSE	LQG	FALSE	92811
27	KING	98101-2795	FALSE	TRUE	FALSE	SQG	FALSE	54171
28	KING	98002-1719	TRUE	TRUE	TRUE	MOG	FALSE	562112
29	KING	98106	FALSE	TRUE	TRUE	LQG	FALSE	48832
30	KING	98134	FALSE	TRUE	FALSE	XQG	FALSE	484121
31	KING	98005	TRUE	FALSE	FALSE	SQG	FALSE	61111
32	KING	98134-1030	FALSE	TRUE	FALSE	XQG	FALSE	483113
33	KING	98134	TRUE	FALSE	FALSE	LQG	FALSE	423930
34	KING	98004	TRUE	FALSE	FALSE	SQG	FALSE	61111
35	KING	98108	TRUE	TRUE	TRUE	MOG	FALSE	56299
36	KING	98107	FALSE	TRUE	FALSE	SQG	FALSE	32739
37	KING	98055	TRUE	FALSE	FALSE	LQG	FALSE	336413
38	KING	98032	TRUE	TRUE	TRUE	XQG	FALSE	562112
39	KING	98108	TRUE	FALSE	FALSE	XQG	FALSE	423930
40	KING	98032	FALSE	TRUE	TRUE	XQG	FALSE	562112
41	KING	98108	FALSE	TRUE	TRUE	XQG	FALSE	488320
42	KING	98108	FALSE	TRUE	FALSE	XQG	FALSE	484121
43	KING	98032	TRUE	FALSE	FALSE	LQG	FALSE	812990
44	KING	98003	FALSE	TRUE	FALSE	XQG	FALSE	621610
45	KING	98032-1952	TRUE	TRUE	TRUE	LQG	FALSE	42469
46	KING	98008	TRUE	FALSE	FALSE	SQG	FALSE	61111
47	KING	98006	TRUE	FALSE	FALSE	SQG	FALSE	61111

Washington State Hazardous Waste Transporters

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	A	C	D	E	F	G
1	RCRA Site ID	Effective Date	Porting Year	Common Name	Address	City
48	WA0000101774	1/1/2007		Pepper Hill Shopping Ctr	14701 Aurora Ave N Parking Lot	Seattle
49	WAD980982276	12/31/2008	2008	Bellevue School Dist 405	12037 NE 5TH ST	BELLEVUE
50	WAD083732537	12/31/2008	2008	Keep It Clean Recycling & Equipment Co	21851 NE 97TH PL	REDMOND
51	WAD988522579	12/31/2008	2008	South End Auto Wrecking Inc	3400 E VALLEY RD	RENTON
52	WAR000001354	12/31/2008	2008	CMX Corp	6601 S GLACIER ST	TUKWILA
53	WAD988472791	12/31/2008	2008	FBN Enterprises Inc	16220 NE 6th St	Bellevue
54	WA3891406339	2/26/2009		US DOE BPA Covington Substation	28401 COVINGTON WAY SE	KENT
55	WAD045684990	9/1/2009		Boyer Logistics Inc	7318 4TH AVE S	SEATTLE
56	WAH000004457	12/31/2008	2008	Kleen Environmental Technologies Inc	5955 W Marginal Way	Seattle
57	WAD988510012	12/31/2008	2008	Ovals Motorsport Inc	1620 S.341ST PL SP W2	FEDERAL WAY
58	WAD075148189	12/31/2008	2008	Kwik N Clean	2311 156th Ave NE	Bellevue
59	WAH000002550	12/31/2008	2008	Northwest Handling Systems Inc Renton Br	1100 SW 7TH ST	RENTON
60	WA2170023418	12/31/2008	2008	US Navy PSNS & IMF	1400 FARRAGUT AVE CODE 106.3	BREMERTON
61	WAH000020610	12/31/2008	2008	A1 Services Inc	2603 SHERMAN AVE	PORT ORCHARD
62	WAH000033288	12/31/2008	2008	Kisap Cnty Consolidated Housing Authori	232 Washington Ave	Bremerton
63	WAH000028679	12/31/2008	2008	Larson Glass Technology Inc	851 Bethel Ave	Port Orchar
64	WA5170027291	12/31/2008	2008	Naval Base Kitsap at Bangor	7000 Finback Circle E300	Silverdale
65	WAD982656365	12/31/2008	2008	North Kitsap High School	1780 NE HOSTMARK ST	POULSBO
66	WAH000008169	12/31/2008	2008	Chem Sate Environmental Inc Transporter	400 S MAIN TRANSPORTER	KITTITAS
67	WAD988523940	12/31/2008	2008	Cispus Learning Center	2142 CISPUS RD	RANDLE
68	WAR000011122	12/31/2008	2008	Certified Cleaning Svcs Inc	2103 E 112TH ST FRONT SHOP	TACOMA
69	WAD988486635	12/31/2008	2008	SME Corp	311 E 26TH ST	TACOMA
70	WAR000010785	12/31/2008	2008	Phoenix Environmental Svcs Inc	2212 PORT OF TACOMA RD	TACOMA
71	WAD061672812	12/31/2008	2008	Resource Recovery Corp PSC	1629 E ALEXANDER AVE RESOURCE RECOVERY	TACOMA
72	WAD988499554	12/31/2008	2008	Drain Pro Inc	2901 72nd St E	Tacoma
73	WAD980511729	12/31/2008	2008	Petroleum Reclaiming Service Inc	3003 TAYLOR WAY	TACOMA
74	WAD988475323	12/31/2008	2008	Thermo Fluids Inc	1517 PEASE AVE	SUMNER
75	WAR000001743	12/31/2008	2008	Burlington Environmental LLC Tacoma Tran	1629 E Alexander Ave Upper Level	Tacoma
76	WAD002799260	12/31/2008	2008	Lynden Transport Inc	5410 12TH STE	FIFE
77	WAH000030970	12/31/2008	2008	Adar Construction Inc	20515 63rd Ave E	Spanaway
78	WAH000031093	12/31/2008	2008	American Petroleum Env Svcs Inc	2117 E River St	Tacoma
79	WAH000032444	2/5/2008		FTR Pacific Inc	3212 84th St E	Tacoma
80	WAH000024616	12/31/2008	2008	NorWest Express Inc	5221 144th St E	Tacoma
81	WAH000033271	12/31/2008	2008	Bonney Lake City Public Works Dept	4812 Ridgeview Dr E	Sumner
82	WAR000001263	12/31/2008	2008	Steve Forler Trucking Inc	19827 150TH AVE E	GRAHAM
83	WAD980976906	12/31/2008	2008	Hallmark Refining Corp	1016 DALE LANE	MOUNT VERNON
84	WAD092884873	12/31/2008	2008	Innovative Vacuum Services Inc	20909 70TH AVE W	EDMONDS
85	WAH000024418	12/31/2008	2008	R C Painting	21828 87th Ave SE Ste A	Woodinville
86	WAD988476156	12/31/2008	2008	Edmonds School Dist 15 Edmonds HS	7600 212TH SW	EDMONDS
87	WAH000033160	12/31/2008	2008	Glacier Environmental Svcs Inc	4416 Russell Rd Ste A	Mukilteo
88	WAH000024717	12/31/2008	2008	MP Environmental	3400 34th Ave NE	Everett
89	WAH000029378	12/31/2008	2008	Norkote Inc	18717 76th Ave W Ste J	Lynnwood



Washington State Hazardous Waste Transporters  
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	H	I	J	K	L	M	N	O
	County	Zip Code	Transp_Own_Waste	Flunsp_Others_Waste	Transfer_Facility?	Gen_Status_CD	TSDR_Facility?	NAICS_Code
48	KING	98133-6547	TRUE	FALSE	FALSE	LQG	FALSE	531390
49	KING	98005	TRUE	FALSE	FALSE	LQG	FALSE	61111
50	KING	98053-7689	FALSE	TRUE	FALSE	XQG	FALSE	56199
51	KING	98055	TRUE	FALSE	FALSE	SQG	FALSE	44131
52	KING	98188-4718	FALSE	TRUE	FALSE	SQG	FALSE	42499
53	KING	98008	FALSE	TRUE	FALSE	XQG	FALSE	54138
54	KING	98042-9134	TRUE	FALSE	FALSE	SQG	FALSE	92190
55	KING	98108	FALSE	TRUE	TRUE	XQG	FALSE	483113
56	KING	98168-7522	FALSE	TRUE	FALSE	XQG	FALSE	54162
57	KING	98003-6888	FALSE	TRUE	FALSE	SQG	FALSE	44131
58	KING	98007-3894	FALSE	TRUE	FALSE	SQG	FALSE	81232
59	KING	98055	TRUE	FALSE	FALSE	SQG	FALSE	53119
60	KITSAP	98314-5001	TRUE	FALSE	FALSE	LQG	TRUE	92811
61	KITSAP	98366	FALSE	TRUE	FALSE	XQG	FALSE	56179
62	KITSAP	98337	TRUE	FALSE	FALSE	SQG	FALSE	925110
63	KITSAP	98366	TRUE	FALSE	FALSE	SQG	FALSE	81112
64	KITSAP	98315-1087	TRUE	FALSE	FALSE	LQG	FALSE	92811
65	KITSAP	98370	TRUE	FALSE	TRUE	SQG	FALSE	61111
66	KITTITAS	98934	FALSE	TRUE	FALSE	XQG	FALSE	562112
67	LEWIS	98377-9305	TRUE	FALSE	FALSE	SQG	FALSE	72131
68	PIERCE	98445	FALSE	TRUE	FALSE	XQG	FALSE	56179
69	PIERCE	98421-1308	FALSE	TRUE	FALSE	XQG	FALSE	23829
70	PIERCE	98421	TRUE	TRUE	FALSE	XQG	FALSE	562112
71	PIERCE	98421	TRUE	TRUE	FALSE	XQG	FALSE	48411
72	PIERCE	98404	FALSE	TRUE	FALSE	XQG	FALSE	541620
73	PIERCE	98421-4309	FALSE	TRUE	FALSE	SQG	FALSE	424720
74	PIERCE	98390-1627	FALSE	TRUE	FALSE	XQG	FALSE	48411
75	PIERCE	98421	TRUE	TRUE	FALSE	XQG	FALSE	48411
76	PIERCE	98424-1355	FALSE	TRUE	TRUE	XQG	FALSE	484121
77	PIERCE	98387	FALSE	TRUE	FALSE	XQG	FALSE	562211
78	PIERCE	98421	TRUE	TRUE	TRUE	XQG	FALSE	454312
79	PIERCE	98446	FALSE	TRUE	FALSE	XQG	FALSE	484220
80	PIERCE	98446	FALSE	TRUE	FALSE	XQG	FALSE	484110
81	PIERCE	98391	TRUE	FALSE	FALSE	SQG	FALSE	423830
82	PIERCE	98338	FALSE	TRUE	FALSE	XQG	FALSE	48411
83	SKAGIT	98273	TRUE	TRUE	FALSE	LQG	TRUE	333315
84	SNOHOMISH	98026	FALSE	TRUE	FALSE	XQG	FALSE	23829
85	SNOHOMISH	98072	TRUE	FALSE	FALSE	MQG	FALSE	238320
86	SNOHOMISH	98020	TRUE	FALSE	FALSE	SQG	FALSE	61111
87	SNOHOMISH	98275	FALSE	TRUE	FALSE	XQG	FALSE	562910
88	SNOHOMISH	98205	FALSE	TRUE	FALSE	XQG	FALSE	48423
89	SNOHOMISH	98037	TRUE	TRUE	FALSE	XQG	FALSE	238990

Washington State Hazardous Waste Transporters  
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	A	C	D	E	F	G
1	RCRA Site ID	Effective Date	Year	Common Name	Address	City
	90 WAH000030450	12/31/2008	2008	Affordable Abatement Inc	1919 Everett Ave	Everett
	91 WAH000030491	12/31/2008	2008	Pristine Environmental Services Inc	3511 132nd St SW Ste 2	Lynnwood
	92 WAH000030727	12/31/2008	2008	Newsom Bros	20902 67th Ave NE	Arlington
	93 WA5891406352	2/26/2009		Bonneville Power Admin Snohomish	914 AVE D	SNOHOMISH
	94 WAH000019406	12/31/2008	2008	Brier Terrace Middle School Edmonds SD 1	22200 BRIER RD	BRIER
	95 WAH000019398	12/31/2008	2008	Laz Tool & Fabricators Inc	14816 ROOSEVELT RD	SNOHOMISH
	96 WAD988476164	12/31/2008	2008	Edmonds School Dist 15 Lynnwood High SH	3001 184TH SW	LYNNWOOD
	97 WAD982656623	12/31/2008	2008	Edmonds School Dist 15 Meadowdale HS	6002 168TH ST SW	LYNNWOOD
	98 WAD0600030780	12/31/2008	2008	Agco Refining LLC	3701 S RD	MUKILTEO
	99 WAD988513651	12/31/2008	2008	Dwayne Lanes Arlington Chevrolet Geo	315 WEST AVE	ARLINGTON
	100 WAD988491353	12/31/2008	2008	Edmonds School Dist 15 Mt Lake Terrace	21801 44TH AVE W	MOUNTLAKE TERRACE
	101 WAD988476172	12/31/2008	2008	Edmonds School Dist 15 Meadowdale MS	6500 168TH SW	LYNNWOOD
	102 WAH000011866	12/31/2008	2008	Prometco Inc	7429 W BOSTIAN RD	WOODINVILLE
	103 WAH000009217	12/31/2008	2008	Edmonds Sch Dist Madrona School	9300 236TH SW	EDMONDS
	104 WAH000008540	12/31/2008	2008	Edmonds School Dist College Place	7501 208TH SW	LYNNWOOD
	105 WAD980982474	12/31/2008	2008	Edmonds SD No 15 Maint & Trans Dept	2927 ALDERWOOD MALL BLVD	LYNNWOOD
	106 WAD988506366	12/31/2008	2008	Big Sky Industrial	9711 W EUCLID RD	LYNNWOOD
	107 WAH000018838	12/31/2008	2008	Able Clean up Technologies Inc	4117 E NEBRASKA	SPOKANE
	108 WAH000015545	12/31/2008	2008	Thermo Fluids Inc Spokane	N 508 Fiske Ave	Spokane
	109 WAD117356386	12/31/2008	2008	Bulk Service Transport Inc Spokane	16702 E Euclid Ave	Spokane
	110 WAH000015883	12/31/2008	2008	Safety Klean Systems 3808 N Sullivan	3808 N SULLIVAN RD BLDG 31 TRANSFER FACI	SPOKANE
	111 WAH000031052	12/31/2008	2008	Burlington Environmental LLC Spokane	3808 N Sullivan Rd Bldg 17 Ste B	Spokane Valley
	112 WAH000025242	12/31/2008	2008	Safety Klean Systems Inc New Bldg	3808 N Sullivan Rd Bldg 12 Ste 1W	Spokane
	113 WAH000019166	12/31/2008	2008	Able Clean Up Tech Inc	4117 E Nebraska Ave Transfer Facility	Spokane
	114 WAD020239844	12/31/2008	2008	Circle M Construction Co Inc	17711 E EUCLID	SPOKANE
	115 WAH000005736	4/8/2009		West Star Construction Inc	17021 E WELLESLEY	SPOKANE
	116 WAD988488417	12/31/2008	2008	Summit Lake Antiques	10724 SUMMIT LAKE RD NW	OLYMPIA
	117 WAD988473476	12/31/2008	2008	Tumwater School Dist Admin Offices	419 LINWOOD AVE SW	TUMWATER
	118 WAD988479838	12/31/2008	2008	Pacific Cleaners	3530 PACIFIC AVE SE	OLYMPIA
	119 WAD027372838	12/31/2008	2008	Panorama City	1751 CIRCLE LANE SE	LACEY
	120 WAD988475026	12/31/2008	2008	New Market Vocational Skill	7299 NEW MARKET ST SW	TUMWATER
	121 WAH000009357	12/31/2008	2008	Motor Trucks Inc Bellingham	929 THOMAS RD	BELLINGHAM
	122 WAD988502050	12/31/2008	2008	Westman Marine Inc	218 MCMILLAN AVE	BLAINE
	123 WA4891419653	2/26/2009		Bonneville Power Admin Custer Substation	7357 PORTAL WAY	CUSTER
	124 WAD103368940	12/31/2008	2008	Ludtke Pacific Trucking Inc	4059 BAKERVIEW VALLEY RD	BELLINGHAM
	125 WAH000005249	12/31/2008	2008	Western Refinery Services Inc	2380 Grandview Rd	Ferndale
	126 WAH000000497	12/31/2008	2008	PSC Industrial Outsourcing LP Bellingha	4430 Pacific Hwy	Bellingham
	127 WAH000032822	12/31/2008	2008	BAI Environmental Services	752 Loomis Trail Rd Transporter	Lynden
	128 WAD061668067	12/31/2008	2008	Autocraft Paint Body Works LLC	1804 S.3RD AVE	Yakima
	129 WAD043639848	12/31/2008	2008	WA DSHS Yakima Valley School	609 SPEYERS RD	SELAH
	130 WAD988499612	12/31/2008	2008	Yakima Automotive Inc	1 S 12TH AVE	YAKIMA
	131 WAD009256710	12/31/2008	2008	DEL MONTE FOODS 125	108 W WALNUT ST	YAKIMA
	132 WAH000006429	12/31/2008	2008	Bunzl Extrusion Yakima	2405 S 3RD AVE	UNION GAP
	133 WAH000001644	12/31/2008	2008	WA DOT Bridges 82 114S & 82 115S	SR 82 YAKIMA & NACHES RIVERS VIC MP30	YAKIMA
	134 WAH000012716	12/31/2008	2008	SANLECO INC	116 N 1ST ST	SUNNYSIDE
	135 WAD988474904	12/31/2008	2008	Yakima Valley Technical Skills Center	1116 S 15TH AVE	YAKIMA

Washington State Hazardous Waste Transporters  
As of September 2009

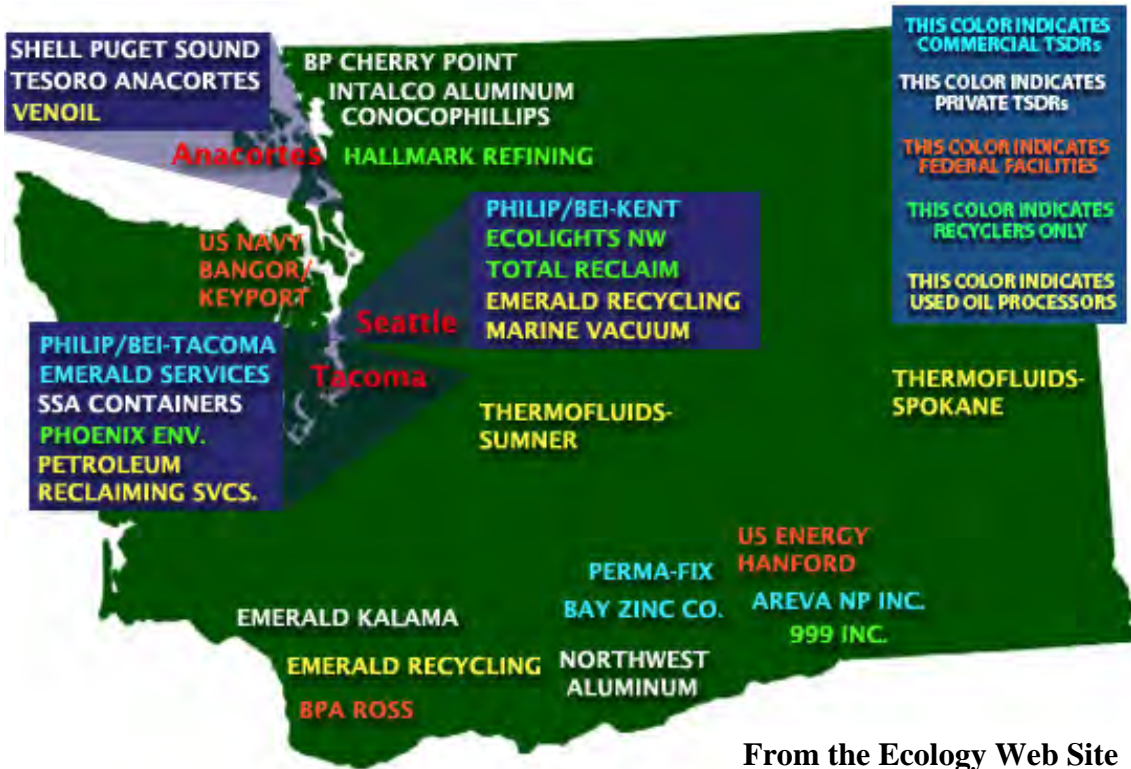
	H	I	J	K	L	M	N	O
	County	Zip Code	Transp_Own_Waste	Flnsp_Others_Waste	Transfer_Facility?	Gen_Status_CD	TSDR_Facility?	NAICS_Code
1								
90	SNOHOMISH	98201	FALSE	TRUE	FALSE	SQG	FALSE	23899
91	SNOHOMISH	98087	TRUE	TRUE	FALSE	SQG	FALSE	562112
92	SNOHOMISH	98223	FALSE	TRUE	FALSE	XQG	FALSE	238910
93	SNOHOMISH	98290	TRUE	FALSE	FALSE	SQG	FALSE	921190
94	SNOHOMISH	98036-8099	TRUE	FALSE	FALSE	SQG	FALSE	61111
95	SNOHOMISH	98290	TRUE	FALSE	FALSE	XQG	FALSE	333514
96	SNOHOMISH	98037	TRUE	FALSE	FALSE	SQG	FALSE	61111
97	SNOHOMISH	98037-2799	TRUE	FALSE	FALSE	SQG	FALSE	61111
98	SNOHOMISH	98275	TRUE	FALSE	FALSE	SQG	FALSE	33149
99	SNOHOMISH	98223-1342	TRUE	FALSE	FALSE	SQG	FALSE	44111
100	SNOHOMISH	98043-3598	TRUE	FALSE	FALSE	SQG	FALSE	61111
101	SNOHOMISH	98037	TRUE	FALSE	FALSE	SQG	FALSE	61111
102	SNOHOMISH	98072	TRUE	FALSE	FALSE	SQG	FALSE	333999
103	SNOHOMISH	98020	TRUE	FALSE	FALSE	SQG	FALSE	61111
104	SNOHOMISH	98036-5897	TRUE	FALSE	FALSE	SQG	FALSE	61111
105	SNOHOMISH	98036-4718	TRUE	FALSE	FALSE	SQG	FALSE	61111
106	SPOKANE	99224	FALSE	TRUE	FALSE	XQG	FALSE	56179
107	SPOKANE	99217	FALSE	TRUE	FALSE	XQG	FALSE	562112
108	SPOKANE	99202	FALSE	TRUE	FALSE	XQG	FALSE	541620
109	SPOKANE	99216	FALSE	TRUE	FALSE	XQG	FALSE	484110
110	SPOKANE	99216	TRUE	TRUE	TRUE	XQG	FALSE	493190
111	SPOKANE	99216	TRUE	TRUE	TRUE	XQG	FALSE	562112
112	SPOKANE	99216	TRUE	TRUE	TRUE	MQG	FALSE	562112
113	SPOKANE	99217	TRUE	FALSE	TRUE	SQG	FALSE	562112
114	SPOKANE	99216	FALSE	TRUE	FALSE	XQG	FALSE	488999
115	SPOKANE	99216	FALSE	TRUE	FALSE	XQG	FALSE	236115
116	THURSTON	98502	TRUE	FALSE	FALSE	SQG	FALSE	45331
117	THURSTON	98502	TRUE	FALSE	FALSE	SQG	FALSE	61111
118	THURSTON	98501	FALSE	TRUE	FALSE	SQG	FALSE	81232
119	THURSTON	98503	TRUE	FALSE	FALSE	SQG	FALSE	53111
120	THURSTON	98501	TRUE	FALSE	FALSE	SQG	FALSE	611519
121	WHATCOM	98226-9044	TRUE	FALSE	FALSE	SQG	FALSE	44111
122	WHATCOM	98230	TRUE	FALSE	FALSE	SQG	FALSE	336612
123	WHATCOM	98240	TRUE	FALSE	FALSE	SQG	FALSE	921190
124	WHATCOM	98226	FALSE	TRUE	FALSE	SQG	FALSE	48423
125	WHATCOM	98248	FALSE	TRUE	FALSE	XQG	FALSE	48422
126	WHATCOM	98226	TRUE	TRUE	FALSE	XQG	FALSE	238990
127	WHATCOM	98264	FALSE	TRUE	FALSE	SQG	FALSE	562212
128	YAKIMA	98902	TRUE	FALSE	FALSE	XQG	FALSE	811121
129	YAKIMA	98942	TRUE	FALSE	FALSE	SQG	FALSE	62311
130	YAKIMA	98902-3106	TRUE	FALSE	FALSE	SQG	FALSE	811111
131	YAKIMA	98902-3443	TRUE	FALSE	FALSE	SQG	FALSE	311421
132	YAKIMA	98903	TRUE	FALSE	FALSE	SQG	FALSE	326121
133	YAKIMA	98909	TRUE	FALSE	FALSE	XQG	FALSE	92612
134	YAKIMA	98944	FALSE	TRUE	FALSE	XQG	FALSE	48412
135	YAKIMA	98902	TRUE	FALSE	FALSE	SQG	FALSE	811121

## Active Hazardous Waste and Used Oil Facilities in King County

Information about active hazardous waste and used oil facilities can be obtained from the Washington Department of Ecology’s Web site, located at:

<http://www.ecy.wa.gov/programs/hwtr/hwfacilities/pages/activefac.html>

This Web site provides additional information about the facilities described in Chapter 2 of the Plan Update. This list does not include the ten-day transfer facilities listed in Chapter 2.



If you have additional questions, contact:

Solid Waste and Financial Assistance Program  
 Northwest Regional Office  
 Washington Department of Ecology  
 3190 - 160th Ave. SE  
 Bellevue, WA 98008-5452

**Information and receptionist:**  
 425-649-7000

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Department of Ecology, Toxics Cleanup Program, Hazardous Site List, February 18, 2009

FS ID	NAME	CITY	RANK	STATUS	TYPE
2035	GENERAL TRANSPORT CO 13TH AVE SW	SEATTLE	0	RA conducted	residual contam.left insti. contrl
2127	HARBOR AVE LANDFILL	SEATTLE	0	RA conducted	residual contam. left insti. contrl
2021	HARBOR ISLAND	SEATTLE	0	RA in progress	
2033	INDUSTRIAL OFFICE COMPLEX	SEATTLE	0	RA conducted	residual contam.left insti. contrl
2026	NON FERROUS METALS INC	SEATTLE	0	RA conducted	residual contam.left insti. contrl
2023	PACIFIC MOLASSES CO PM AG PRODUCTS	SEATTLE	0	RA conducted	residual contam.left insti. contrl
245	QUEEN CITY FARMS	MAPLE VALLEY	0	RA in progress	
140	QUEEN CITY FARMS A	ISSAQUAH	0	RA in progress	
144	QUEEN CITY FARMS A 4 TEK	ISSAQUAH	0	RA in progress	
143	QUEEN CITY FARMS A BURIED DRUM	ISSAQUAH	0	RA in progress	
142	QUEEN CITY FARMS A IRM	ISSAQUAH	0	RA in progress	
141	QUEEN CITY FARMS B	ISSAQUAH	0	RA in progress	
2045	QUENDALL TERMINALS	RENTON	0	RA in progress	
2038	SEAFAB METAL SURFACE IMPOUNDMENT	SEATTLE	0	RA conducted	residual contam. left insti. contrl
2037	SEAFAB METALS CO	SEATTLE	0	RA conducted	residual contam. left insti. contrl
2027	SEATTLE IRON & METALS MAIN YRD	SEATTLE	0	RA conducted	residual contam. left insti. contrl
2025	SEATTLE PORT LECKENBY CO	SEATTLE	0	RA conducted	residual contam. left insti. contrl
2028	SHELL OLD TERM 18 PORT OF SEATTLE	SEATTLE	5	RA in progress	
2031	TODD PACIFIC SHIPYARDS	SEATTLE	0	RA in progress	
2032	VALUE PLATING & METAL POL	SEATTLE	0	RA conducted	residual contam. left insti. contrl
145	WESTERN PROCESSING	KENT	0	Construction Completed	O&M underway ♦♦
2039	WEYERHAEUSER LAB	SEATTLE	0	RA conducted	residual contam. left insti. contrl
146	WYCOFF CO WEST SEATTLE	SEATTLE	0	RA in progress	

♦ 19 Superfund sites are Federal (EPA) have lead ♦♦ 1 Superfund site is (State) has lead

Seattle has 15 sites

Issaquah has 5 sites

Mapel Valley, Renton and Kent have 1 site each

source; <http://www.ecy.wa.gov/pubs/0909042.pdf>

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List of Hazardous Sites Ranked Awaiting Remedial Action or Remedial Action was in Progress in February 2009

A		B		C		D		E	
1	FS ID	SITE NAME	CITY	RANK	STATUS				
2	2458	1624 BELLEVUE WY SE PROPERTY	BELLEVUE	4	Ranked, Awaiting RA				
3	2072	8801 E MARGINAL WAY S	TUKWILA	1	RA in progress				
4	2404	AI BRAKE	SEATTLE	3	Ranked, Awaiting RA				
5	2077	ACE GALVANIZING INC 96TH	SEATTLE	3	Ranked, Awaiting RA				
6	2586	ACME INTERCITY FREIGHT	SEATTLE	5	RA in progress				
7	2078	ACME PLATING WORKS	SEATTLE	5	Ranked, Awaiting RA				
8	2079	ADVANCE ELECTROPLATING	SEATTLE	5	Ranked, Awaiting RA				
9	1202016	AESQUIVEL PROPERTY	SEATTLE	4	Ranked, Awaiting RA				
10	7163112	AFFORDABLE AUTO WRECKING	SEATTLE	5	Ranked, Awaiting RA				
11	2087	ASKO PROCESSING INC	SEATTLE	5	RA in progress				
12	2432	ASSOCIATED PETROLEUM PRO	ENUMCLAW	1	RA in progress				
13	2326	AUBURN SALVAGE & RECYCLING	AUBURN	1	RA in progress				
14	19408	AURORA CLEANING MCABEE PROPERTY	SEATTLE	5	Ranked, Awaiting RA				
15	24436664	AUTO SERVICE COMPANY	SEATTLE	5	Ranked, Awaiting RA				
16	39484867	B & B PARTNERSHIP AREA BB5	KENT	5	Ranked, Awaiting RA				
17	85171367	BAKKERS BETTER MOTORS	SEATTLE	4	Ranked, Awaiting RA				
18	2346	BALLARD AUTO WRECKING	SEATTLE	2	RA in progress				
19	2355	BALLARD RECYCLING	SEATTLE	3	Ranked, Awaiting RA				
20	2330	BALMER YARD BNR	SEATTLE	5	Ranked, Awaiting RA				
21	59898498	BANG PROPERTY	WOODINVILLE	3	Ranked, Awaiting RA				
22	76716221	BARBEE MILL COMPANY	RENTON	3	Ranked, Awaiting RA				
23	2308	BARDAHL	SEATTLE	2	Ranked, Awaiting RA				
24	91759218	BELLEVUE WAY DRY CLEANERS	BELLEVUE	3	Ranked, Awaiting RA				
25	6241773	BNRR SWITCHING YARD CEDAR FALLS	CEDAR FALLS	5	Ranked, Awaiting RA				
26	2104	BNSF RAILWAY SKYKOMISH FACILITY	SKYKOMISH	1	RA in progress				
27	2018	BOEING FABRICATION DIV	AUBURN	3	Ranked, Awaiting RA				
28	1138721	BOEING ISAACSON PROPERTY	TUKWILA	2	Ranked, Awaiting RA				
29	2218	BOEING ISAACSON THOMPSON	TUKWILA	2	Ranked, Awaiting RA				
30	2225	BOEING NORTHWARD LOT 4	KENT	4	Ranked, Awaiting RA				
31	2100	BOEING PLANT 2	SEATTLE	1	RA in progress				
32	2097	BOEING RENTON	RENTON	1	RA in progress				
33	2102	BORDEN CHEMICAL CO	KENT	1	Awaiting SHA				
34	2302	BP STA 11352	BOTHELL	3	RA in progress				
35	2024	BP WEST COAST PRODUCTS	SEATTLE	0	RA in progress				
36	31119678	BRY'S AUTO WRECKING	SEATTLE	3	Ranked, Awaiting RA				
37	4521912	BSB HEXCEL	KENT	1	RA in progress				
38	82663557	BURDIC FEED INC	KENT	5	Ranked, Awaiting RA				
39	6341214	BURGER KING FORMER	SEATTLE	5	Ranked, Awaiting RA				



List of Hazardous Sites Ranked Awaiting Remedial Action or Remedial Action was in Progress in February 2009

A	B	C	D	E
FS ID	SITE NAME	CITY	RANK	STATUS
1				
40	BURLINGTON NORTHERN RR AUBURN	AUBURN	1	RA in progress
41	C & F AUTO WRECKING	DUVALL	1	Ranked, Awaiting RA
42	CARLOS UNDERCOATING SANDBLAST	SEATAC	3	Ranked, Awaiting RA
43	CENEX HARVEST STATES AUBURN	AUBURN	3	RA in progress
44	CENTRAL PAINTING	SEATTLE	2	Ranked, Awaiting RA
45	CHAMPION INTL BALLARD SED	SEATTLE	1	RA in progress
46	CHEM CENTRAL SEATTLE	KENT	1	RA in progress
47	CHEVRON BULK PLANT 61002620	GROTTO	3	Ranked, Awaiting RA
48	CIRCLE K STA 1461	SEATTLE	3	RA in progress
49	CLEANING CENTER OF REDMOND	REDMOND	2	RA in progress
50	COLEMAN CREOSOTING WORKS	SEATTLE	5	Ranked, Awaiting RA
51	CONOCOPHILLIPS RENTON TERMINAL	RENTON	5	Ranked, Awaiting RA
52	COVROX INC	KENT	2	Ranked, Awaiting RA
53	CROWLEY MARINE SVCS INC 8TH AVE S	SEATTLE	2	Ranked, Awaiting RA
54	D LEONARD & SONS	SEATTLE	4	RA and all other activities completed
55	DISCOVERY PARK OLD MAINT YD	SEATTLE	5	Ranked, Awaiting RA
56	DUWAMISH RIVER SLIP 4	SEATTLE	0	RA in progress
57	DUWAMISH SHIPYARD INC	SEATTLE	2	Ranked, Awaiting RA
58	EASTERN SUPPLY CO	SEATTLE	2	Construction Completed O&M underway
59	ELECTROFINISHING CO	AUBURN	4	Ranked, Awaiting RA
60	ELLIOTT BAY BICYCLES	SEATTLE	5	Ranked, Awaiting RA
61	EMERALD TOOL INC	SEATTLE	5	Ranked, Awaiting RA
62	ENGINEERED COATING SYSTEMS	NORTH BEND	1	Ranked, Awaiting RA
63	ER & JR SUTTER LLC	SEATTLE	1	Ranked, Awaiting RA
64	FIELDS CORP KENT	KENT	1	Ranked, Awaiting RA
65	FIRST AVE BRIDGE LANDFILL	SEATTLE	4	Ranked, Awaiting RA
66	FISHER PROPERTY	SEATTLE	5	Ranked, Awaiting RA
67	FOX AVE BLDG	SEATTLE	1	RA in progress
68	GACO WESTERN LLC	TUKWILA	3	Construction Completed, O&M underway
69	GAS WORKS PARK WA NATURAL GAS	SEATTLE	1	RA in progress
70	GENERAL ELECTRIC AVIATION DIV	SEATTLE	2	RA in progress
71	GEORGETOWN STEAM PLANT	SEATTLE	5	Ranked, Awaiting RA
72	GLACIER NORTHWEST SEATTLE TERMINAL	SEATTLE	1	RA in progress
73	GOODWILL CORPORATION DEARBORN	SEATTLE	2	Ranked, Awaiting RA
74	HARBOR ISLAND EAST WATERWAY	SEATTLE	0	RA in progress
75	HARRINGTON BEALL GREENHOUSES	VASHON	2	Ranked, Awaiting RA
76	HERMAN PROPERTY	FEDERAL WAY	1	Ranked, Awaiting RA
77	HOUSE OF KLEEN INC	SEATTLE	3	Ranked, Awaiting RA

List of Hazardous Sites Ranked Awaiting Remedial Action or Remedial Action was in Progress in February 2009

A		B		C		D		E	
1	FS ID	SITE NAME	CITY	RANK	STATUS				
78	2356	HYDRAULIC REPAIR & DESIGN INC	KENT	3	RA in progress				
79	2534	HYLITE MIRROR	SEATTLE	3	Ranked, Awaiting RA				
80	2154	INDUSTRIAL CONTAINER SERVICES WA LLC	SEATTLE	4	Ranked, Awaiting RA				
81	2133	INDUSTRIAL PLATING CORP	SEATTLE	4	Ranked, Awaiting RA				
82	2331	INTERBAY BNR	SEATTLE	1	Ranked, Awaiting RA				
83	2335	INTERSTATE COATINGS	SEATTLE	2	Ranked, Awaiting RA				
84	2316	ISLAND AUTO WRECKING I	VASHON	3	Ranked, Awaiting RA				
85	23199267	ISLAND AUTO WRECKING II	VASHON	5	Ranked, Awaiting RA				
86	15842283	ISSAQUAH SPORTSMEN CLUB 1	ISSAQUAH	3	Ranked, Awaiting RA				
87	98935455	ISSAQUAH SPORTSMEN CLUB 2	ISSAQUAH	4	Ranked, Awaiting RA				
88	2431	JAMES OIL CO INC	ENUMCLAW	1	RA in progress				
89	98913848	JAPANESE AUTO WRECKING	KENT	2	Ranked, Awaiting RA				
90	1339184	JC COMMERCIAL PROPERTIES LLC	SEATTLE	5	Ranked, Awaiting RA				
91	2068	JH BAXTER & CO INC	RENTON	1	RA in progress				
92	2446	JOHNNYS WRECKING YARD	WOODINVILLE	2	Ranked, Awaiting RA				
93	2382	JORGENSEN FORGE CORP	SEATTLE	1	Ranked, Awaiting RA				
94	2163	KELLY MOORE PAINT CO	SEATTLE	5	Ranked, Awaiting RA				
95	2348	KENMORE IND PARK	KENMORE	1	Ranked, Awaiting RA				
96	2042	KENT HIGHLANDS LANDFILL	KENT	0	RA conducted, res. contam left, insti. cntrl				
97	2457	KEVIK CLEANERS	BELLEVUE	4	Ranked, Awaiting RA				
98	4706	KEY BANK MCABEE PROPERTY	SEATTLE	5	Ranked, Awaiting RA				
99	88394523	KINDER MORGAN LIQUIDS TERMINALS LLC	SEATTLE	0	RA in progress				
100	65124715	KING CNTY METRO TRANSIT DIV DEARBORN	SEATTLE	3	RA conducted, res. contam left, insti. cntrl				
101	2217	KING CNTY METRO TRANSIT LAKE UNION	SEATTLE	1	RA in progress				
102	2020	KING CNTY SOLID WST CEDAR HILLS LANDFILL	MAPLE VALLEY	5	Ranked, Awaiting RA				
103	28986332	KING COUNTY GARAGE	SEATTLE	5	Ranked, Awaiting RA				
104	2576	KIRKLAND AV LK ST TRUNK SEWER	KIRKLAND	5	Ranked, Awaiting RA				
105	2256	L & E FRENCH CLEANERS	SEATTLE	2	Ranked, Awaiting RA				
106	2320	LIDLAW	SEATTLE	4	Ranked, Awaiting RA				
107	2203	LAKE UNION DRY DOCK CO	SEATTLE	2	Ranked, Awaiting RA				
108	2250	LAKE UNION STEAM PLANT	SEATTLE	5	Ranked, Awaiting RA				
109	42715721	LAKEVIEW DESIGN & CONSTRUCTION	SEATTLE	5	Ranked, Awaiting RA				
110	2139	LANDSBURG MINE ROGERS SEAM	RAVENSDALE	1	RA in progress				
111	2265	LAURELHURST OIL CO	SEATTLE	4	Ranked, Awaiting RA				
112	95195341	LEMONBUSTERS	SEATTLE	3	Ranked, Awaiting RA				
113	39341377	LEWISTON HOTEL	SEATTLE	5	Ranked, Awaiting RA				
114	2141	LIDCO	KENT	1	RA in progress				
115	2423	LITTLE ETHELS AUTO WRECKING	SEATTLE	1	Ranked, Awaiting RA				

List of Hazardous Sites Ranked Awaiting Remedial Action or Remedial Action was in Progress in February 2009

A		B		C		D		E	
FS ID	SITE NAME	CITY	RANK	STATUS	RANK	STATUS	RANK	STATUS	RANK
116	2226	SEATTLE	5	Ranked, Awaiting RA	5	Ranked, Awaiting RA			
117	34824474	SEATAC	5	Ranked, Awaiting RA	5	Ranked, Awaiting RA			
118	42927743	SEATTLE	0	RA in progress	0	RA in progress			
119	2067	KENT	2	Ranked, Awaiting RA	2	Ranked, Awaiting RA			
120	2216	SEATTLE	3	RA in progress	3	RA in progress			
121	84152951	RENTON	4	Ranked, Awaiting RA	4	Ranked, Awaiting RA			
122	51379913	SEATTLE	4	Ranked, Awaiting RA	4	Ranked, Awaiting RA			
123	2148	SEATTLE	2	RA in progress	2	RA in progress			
124	4769327	SEATTLE	3	Ranked, Awaiting RA	3	Ranked, Awaiting RA			
125	64422957	DES MOINES	5	Ranked, Awaiting RA	5	Ranked, Awaiting RA			
126	2389	FEDERAL WAY	5	Ranked, Awaiting RA	5	Ranked, Awaiting RA			
127	56584198	ENUMCLAW	4	Ranked, Awaiting RA	4	Ranked, Awaiting RA			
128	5268606	SEATTLE	3	Ranked, Awaiting RA	3	Ranked, Awaiting RA			
129	45397859	SEATTLE	4	Ranked, Awaiting RA	4	Ranked, Awaiting RA			
130	95231135	SEATTLE	5	Ranked, Awaiting RA	5	Ranked, Awaiting RA			
131	2047	SEATTLE	3	Construction Completed, O&M underway	3	Construction Completed, O&M underway			
132	48687422	AUBURN	4	Ranked, Awaiting RA	4	Ranked, Awaiting RA			
133	2579	FEDERAL WAY	5	Ranked, Awaiting RA	5	Ranked, Awaiting RA			
134	23849623	SEATTLE	4	RA in progress	4	RA in progress			
135	2390	COVINGTON	3	RA in progress	3	RA in progress			
136	2393	ISSAQUAH	3	Ranked, Awaiting RA	3	Ranked, Awaiting RA			
137	2392	RENTON	3	RA in progress	3	RA in progress			
138	2332	KENT	3	RA in progress	3	RA in progress			
139	2234	SEATTLE	5	RA in progress	5	RA in progress			
140	2395	AUBURN	2	RA in progress	2	RA in progress			
141	2261	BLACK DIAMOND	1	Ranked, Awaiting RA	1	Ranked, Awaiting RA			
142	2412	SEATTLE	4	Ranked, Awaiting RA	4	Ranked, Awaiting RA			
143	2401	KENT	2	Ranked, Awaiting RA	2	Ranked, Awaiting RA			
144	2400	RENTON	2	Ranked, Awaiting RA	2	Ranked, Awaiting RA			
145	2219	KENT	3	Ranked, Awaiting RA	3	Ranked, Awaiting RA			
146	6427	REDMOND	1	Ranked, Awaiting RA	1	Ranked, Awaiting RA			
147	2159	KIRKLAND	2	Ranked, Awaiting RA	2	Ranked, Awaiting RA			
148	2065	RENTON	0	Construction Completed, O&M underway	0	Construction Completed, O&M underway			
149	42286998	BLACK DIAMOND	3	Ranked, Awaiting RA	3	Ranked, Awaiting RA			
150	2706	SEATTLE	3	Ranked, Awaiting RA	3	Ranked, Awaiting RA			
151	2591	AUBURN	4	Ranked, Awaiting RA	4	Ranked, Awaiting RA			
152	71868277	SEATTLE	5	RA in progress	5	RA in progress			
153	48646653	SEATTLE	2	Ranked, Awaiting RA	2	Ranked, Awaiting RA			

List of Hazardous Sites Ranked Awaiting Remedial Action or Remedial Action was in Progress in February 2009

A		B		C		D		E	
1	FS ID	SITE NAME	CITY	RANK	STATUS				
154	2161	PIONEER ENAMEL MANUFACTURE	SEATTLE	4	Ranked, Awaiting RA				
155	1948927	PLASTIC SALES & SERVICE INC	SEATTLE	2	RA in progress				
156	11118	PLAZA ONE HOUR CLEANERS MCABEE PROPERT	SEATTLE	5	Ranked, Awaiting RA				
157	2177	PORT OF SEATTLE N TERMINAL 115	SEATTLE	5	Ranked, Awaiting RA				
158	2056	PRECISION ENGINEERING INC	SEATTLE	1	RA in progress				
159	46659536	QUEEN ANNE PROPERTIES MERCER ST	SEATTLE	2	Ranked, Awaiting RA				
160	88987973	RAINIER MALL	SEATTLE	5	Ranked, Awaiting RA				
161	82838425	RAINIER PRECISION LLC	SEATTLE	5	Ranked, Awaiting RA				
162	2312	RALPHS CONCRETE PUMPING	SEATTLE	3	Ranked, Awaiting RA				
163	8964755	RALPHS CONCRETE PUMPING VACANT LOT	SEATTLE	3	Ranked, Awaiting RA				
164	2188	RAVENNA LANDFILL UNION BAY	SEATTLE	4	Ranked, Awaiting RA				
165	7706588	RON & JERRYS ICE CREAM FORMER	SEATTLE	5	Ranked, Awaiting RA				
166	2228	ROSE HILL PLAZA	KIRKLAND	4	Ranked, Awaiting RA				
167	2502	S & S ENTERPRISES	MAPLE VALLEY	4	Ranked, Awaiting RA				
168	2333	S 252ND ST PACIFIC HWY S	KENT	4	Ranked, Awaiting RA				
169	3146354	SAFFORD PROPERTY	RAVENSDALE	4	Ranked, Awaiting RA				
170	2444	SALMON BAY STEEL BALLARD	SEATTLE	5	Ranked, Awaiting RA				
171	41667164	SAMIS COMPANY PROPERTY	SEATTLE	4	Ranked, Awaiting RA				
172	2229	SAMIS LAND CO SITE	SEATTLE	5	Ranked, Awaiting RA				
173	6495599	SEATAC SWEEPING SERVICES & NOLL MFG	KENT	5	RA in progress				
174	2307	SEATTLE BARREL & COOPERAGE	SEATTLE	4	Ranked, Awaiting RA				
175	16777876	SEATTLE CITY LIGHT 4TH AVE S	SEATTLE	5	Ranked, Awaiting RA				
176	2171	SEATTLE CITY LIGHT SOUTH SERVICE CENTER	SEATTLE	5	Ranked, Awaiting RA				
177	2202	SEATTLE PORT TERMINAL 117	SEATTLE	1	RA in progress				
178	24768	SEATTLE PORT TERMINAL 91	SEATTLE	1	RA in progress				
179	2300	SEATTLE PORT TERMINAL 91 TANK FARM	SEATTLE	1	RA in progress				
180	2043	SEATTLE PUBLIC UTILITIES MIDWAY LANDFILL	KENT	0	RA in progress				
181	2376	SEATTLE PUBLIC UTILITIES OPERATIONS CTR	SEATTLE	5	Ranked, Awaiting RA				
182	2244	SEATTLE STEAM CO POST AV	SEATTLE	5	Ranked, Awaiting RA				
183	2243	SEATTLE STEAM CO WESTERN AV	SEATTLE	5	Ranked, Awaiting RA				
184	2110	SEATTLE TECHNICAL FINISHING INC	SEATTLE	5	Ranked, Awaiting RA				
185	8499	SHELL CHRISTENSEN RAILROAD ST	ENUMCLAW	3	Ranked, Awaiting RA				
186	2030	SHELL OIL PRODUCT SEATTLE TERMINAL	SEATTLE	0	RA in progress				
187	35684714	SHELL OIL PRODUCTS US SAP 120764	SEATAC	5	RA in progress				
188	44228651	SISCHO PROPERTY	MAPLE VALLEY	3	Ranked, Awaiting RA				
189	69144423	SKIPS TIRE CTR	BOTHELL	5	Ranked, Awaiting RA				
190	63051958	SKY HARBOR AVIATION	RENTON	5	Ranked, Awaiting RA				
191	2270	SLAG DISPOSAL BECKWITH PROPRTY	KENT	3	RA and all other activities completed				

List of Hazardous Sites Ranked Awaiting Remedial Action or Remedial Action was in Progress in February 2009

A		B		C		D		E	
1	FS ID	SITE NAME	CITY	RANK	STATUS				
192	74731271	SMI INC TRUST	SEATTLE	4	Ranked, Awaiting RA				
193	2180	SOUTH PARK LANDFILL	SEATTLE	2	Ranked, Awaiting RA				
194	36832998	SPARKS TUNEUP	SEATTLE	5	Ranked, Awaiting RA				
195	2366	SPEAR TRUSTS WHSE	SEATTLE	5	Ranked, Awaiting RA				
196	2057	STERNOFF METALS	SEATTLE	5	Ranked, Awaiting RA				
197	2196	STERNOFF METALS CORPORATION	RENTON	1	RA conducted, confirm mon underway				
198	2596	STONE PROPERTY 55TH AV	SEATTLE	5	Ranked, Awaiting RA				
199	62154765	STOUGHTON ESTATE PROPERTY	SEATTLE	5	Ranked, Awaiting RA				
200	2184	SUNSET PARK & TUB LAKE DUMP	SEATAC	3	Ranked, Awaiting RA				
201	2388	SW HARBOR PROJ LOCKHEED YD 2	SEATTLE	1	RA in progress				
202	2501	TD AUTO BODY & REPAIR	SEATTLE	3	Ranked, Awaiting RA				
203	2352	TIKI CAR WASH	BELLEVUE	3	RA in progress				
204	2187	TYEE LUMBER & MFG	AUBURN	2	Ranked, Awaiting RA				
205	2533	UCO CORPORATION	REDMOND	5	Ranked, Awaiting RA				
206	379891	ULTRA CUSTOM CARE CLEANERS	BOTHELL	3	Ranked, Awaiting RA				
207	2060	UNION STATION SITE	SEATTLE	3	Construction Completed, O&M underway				
208	2191	UNIVERSAL MFG CORP	WOODINVILLE	3	RA in progress				
209	59972834	UNOCAL_306568	SEATTLE	5	Ranked, Awaiting RA				
210	2212	UNOCAL_SEATTLE MARKET ELLIOTT	SEATTLE	4	RA in progress				
211	2210	UNOCAL_SEATTLE MARKET LOWER	SEATTLE	4	RA in progress				
212	2211	UNOCAL_SEATTLE MARKET OFF SITE	SEATTLE	4	RA in progress				
213	2213	UNOCAL_SEATTLE MARKET SED	SEATTLE	4	RA in progress				
214	2209	UNOCAL_SEATTLE MARKET UPLAND	SEATTLE	4	RA conducted, res. contam left, insti. cntrl				
215	2208	UNOCAL_SEATTLE MARKETING TERM	SEATTLE	4	RA in progress				
216	6136999	UPTOWN BAKERY FORMER	SEATTLE	5	RA in progress				
217	6319811	VASHON ATHLETIC CLUB	VASHON	3	Ranked, Awaiting RA				
218	5919773	WA DOT RIGHT OF WAY ISSAQUAH 17TH AVE	ISSAQUAH	2	Ranked, Awaiting RA				
219	6305156	WA DOT S DEARBORN	SEATTLE	5	Ranked, Awaiting RA				
220	1491930	WA UW BIOENGINEERING	SEATTLE	5	Ranked, Awaiting RA				
221	2425	WASTE MANAGEMENT OF SEATTLE	SEATTLE	5	Ranked, Awaiting RA				
222	2194	WESMAR COMPANY INC	SEATTLE	5	RA in progress				
223	12494	WEST COAST EQUIPMENT 2	SEATTLE	3	RA in progress				
224	2283	WYMAN PROPERTY	SEATTLE	4	Ranked, Awaiting RA				
225									
226	<b>DATA SUMMARY</b>								
227									
228	AUBURN - 9 sites								
229	BELLEVUE - 4 sites								
	KING COUNTY has a total of 224 sites								

List of Hazardous Sites Ranked Awaiting Remedial Action or Remedial Action was in Progress in February 2009

A		B		C		D		E	
1	FS ID	SITE NAME	CITY	RANK	STATUS				
230	BLACK DIAMOND	- 2 sites	RA's in progress - 61 sites						
231	BOTHELL	- 3 sites	Awaiting RAs - 150 sites						
232	CEDAR FALLS	- 1 site	Construction Completed, O&M underway - 5 sites						
233	COVINGTON	- 1 site	RA's and all other activities completed - 2 sites						
234	DES MOINES	- 1 site	RA's conducted, res. contam left, insti. Cntrl - 3 sites						
235	DUVALL	- 1 site	Awaiting SHA - 1 site						
236	ENUMCLAW	- 4 sites							
237	ISSAQUAH	- 4 sites	RANK 0 - 9 sites						
238	KENMORE	- 1 site	RANK 1 - 36 sites						
239	KENT	- 20 sites	RANK 2 - 30 sites						
240	KIRKLAND	- 3 sites	RANK 3 - 45 sites						
241	MAPLE VALLEY	- 3 sites	RANK 4 - 38 sites						
242	NORTH BEND	- 1 site	RANK 5 - 66 sites						
243	RAVENSDALE	- 2 sites							
244	REDMOND	- 3 sites							
245	RENTON	- 10 sites							
246	SEATAC	- 4 sites							
247	SEATTLE	- 130 sites							
248	SKYKOMISH	- 1 site							
249	TUKWILA	- 4 sites							
250	VASHON	- 4 sites							
251	WOODINVILLE	- 3 sites							

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# Appendix

## C

### Data and Additional Information regarding Moderate Risk Waste in King County

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**Appendix C: Data and Additional Information regarding Moderate Risk Waste in King County**

Appendix C contains additional information about household hazardous waste (HHW) and small quantity generator waste (SQG) collection and disposal in King County. It includes the Local Hazardous Waste Management Program’s Moderate Risk Waste (MRW) Acceptance Policies and provides additional information about solid waste composition data. This appendix contains:

- **Household Hazardous Waste Collection Data, 1991 – 200**.....page C- 3  
Data from the Local Hazardous Waste Management Program in King County.
- **Small Quantity Generator Collection Data, 2008 – 2009**.....page C- 5  
Data from the Local Hazardous Waste Management Program in King County.
- **2008 SQG Collection Data from Ecology**.....page C-7  
Data provided by Washington Department of Ecology.
- **2009 Moderate Risk Waste Acceptance Policies**.....page C-15  
Data from the Local Hazardous Waste Management Program in King County.
- **2008 Suburban City Collection Data** .....page C-23  
Data from the Local Hazardous Waste Management Program in King County.
- **Solid Waste Composition data**.....page C-25  
Information about and links to King County and Seattle solid waste composition studies.

**A note about numerical targets:**

The Program seeks to serve as many customers as possible and to manage the wastes it receives as high up on the hierarchy as possible. The Program sets the following targets for the waste management hierarchy:

<b>Priority</b>	<b>Program Partner</b>	<b>Waste Category</b>	<b>Target</b>
1	KCSW+SPU	Recycled	> or = 40 %
2	KCSW+SPU	Fuel	< or =50 %
3	KCSW+SPU	Incinerated+Treated	< or =10 %
4	KCSW	Solidified+Landfilled	< or =1 %
5	SPU	Solidified+Landfilled	< or =10 %

Whether these targets can be achieved depends on how much waste is brought into the Program’s facilities, which facilities are used, and what type of waste is brought in.

HHW Service level targets are discussed in the Plan Update and in the 2007-2008 Household Hazardous Waste Service Level Study (Appendix D of this 2010 Plan Update).

For additional information about Program data and policies contact

Office of the Program Administrator  
Local Hazardous Waste Management Program in King County  
150 Nickerson Street, Suite 100  
Seattle, WA 98109  
206-284-7974

For additional information about Ecology data contact

Waste 2 Resources Program  
Northwest Regional Office  
Washington Department of Ecology  
3190 - 160th Ave. SE  
Bellevue, WA 98008-5452

**Information and receptionist:**  
425-649-7000

Local Hazardous Waste Management Program in King County Household Hazardous Waste Collection Data 1991-2008

A	H	I	J	K	M	N	Q	R	S
<b>LHWMP HHW Collection Totals by Year</b>									
1									
2									
3	1997	1998	1999	2000	2001	2002	2003	2004	2005
4	<b>Wastemobile</b>								
5	Tons collected	918	895	1,115	1,034	920	873	648	661
6									1,110
7	Customers served	19,712	20,667	26,658	23,730	21,012	15,438	16,998	19,814
8									
9	<b>Factoria HHW Collection Site</b>								
10	Tons collected					85	463	456	792
11									
12	Customers served					2,348	12,267	13,387	15,552
13									
14	<b>Seattle HHW Collection Sites</b>								
15	Tons collected	407	435.5	418	492	615	717	606	525
16									732
17	Customers served	12,404	12,779	12,862	13,242	15,780	16,262	15,958	16,769
18									
19	<b>SPU transfer stations</b>								
20	Tons collected							167	113
21									
22	<b>LHWMP Facility Totals</b>								
23	Tons Collected	1,325	1,331	1,533	1,526	1,535	1,675	1,717	1,809
24									2,748
25	Customers served	32,116	33,446	39,520	36,972	38,038	43,967	46,343	52,135
26									
27	<b>Suburban Cities</b>								
28	# of collection events	27	22	30	36	37	45	47	45
29									44
30	tons of waste collected	159	247	231	271	249	236	235	206
31									187
32	# of participants	12,700	15,310	15,178	17,126	20,105	19,601	25,586	26,185
33									24,626
34	<b>LHWMP funded collection totals</b>								
35	# of tons	1484	1577.5	1763.5	1797	1,784	1,911	1,953	2,015
36									2,935
37	# of customers	44,816	48,756	54,698	54,098	56,897	57,639	72,528	76,761

LHWMP HHW Collection Data 1991-2008

	T	U	V	W	X	Y
1	<b>LHWMP HHW Collection Totals by Year</b>					
2		2006	2007	2008	1997-2008	Since 1991
3					1997-2008	
4	<b>Wastemobile</b>					
5	Tons collected	1,025	1,392	385	10,977	15,643
6						
7	Customers served	18,260	21,852	14,209	237,541	366,311
8						
9	<b>Factoria HHW Collection Site</b>				1997-2008	
10	Tons collected	832	832	283	3,743	3,743
11						
12	Customers served	17,930	21,345	12,270	95,099	95,099
13						
14	<b>Seattle HHW Collection Sites</b>				1997-2008	
15	Tons collected	943	774	1,158	7,824	9,482
16						
17	Customers served	16,225	17,753	18,398	184,931	241,575
18						
19					1997-2008	
20	Tons collected	169.7			450	450
21						
22	<b>LHWMP Facility Totals</b>					
23	Tons Collected	2,970	2,998	1,826	Total 22,544	29,317
24						
25	Customers served	52,415	60,950	44,877	517,571	702,985
26						
27	<b>Suburban Cities</b>					
28	# of collection events	47	47	46	473	613
29						
30	tons of waste collected	184	189	158	2,551	3,258
31						
32	# of participants	28,479	31,529	31,306	267,731	326,248
33						
34	<b>LHWMP funded collection totals</b>					
35	# of tons	3,154	3,187	1,984	1997-2008 25,545	Since 1991 32,575
36						
37	# of customers	80,894	92,479	76,183	785,302	1,029,233

**Local Hazardous Waste Management Program in King County Small Quantity Generator Waste Collection  
Data 2008 - 2009**

	A	B	C	D
1	<b>LHWMP SQG Collection Totals by Year</b>			
2				
3		<b>2008</b>	<b>2009</b>	<b>Total</b>
4				
5	<b>Factoria HHW Site</b>			
6				
7	Pounds of MRW Collected	18,674	26,041	<b>44,715</b>
8				
9	# of SQGs Served	108	141	<b>249</b>
10				
11	<b>North Seattle HHW Facility</b>			
12				
13	Pounds of MRW Collected		19,705	<b>19,705</b>
14				
15	# of SQGs Served		107	<b>107</b>
16				
17	<b>South Seattle HHW Facility</b>			
18				
19	Pounds of MRW Collected	38,125	45,201	<b>83,326</b>
20				
21	# of SQGs Served	148	191	<b>339</b>
22				
23	<b>Wastemobile</b>			
24				
25	Pounds of MRW Collected	6,921	10,828	<b>17,749</b>
26				
27	# of SQGs Served	22	52	<b>74</b>
28				
29				
30	<b>LHWMP Facility Totals</b>			
31				
32	Pounds of MRW Collected	63,720	101,775	<b>165,495</b>
33				
34	# of SQGs Served	278	491	<b>769</b>
35				
36	Total tons collected	32	51	<b>83</b>

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Summary of SQG Waste Collected in King County in 2008 (Ecology Data)

Waste Stream	Total Pounds Collected	Percent of Waste Collected					
Acids	8,661	0.35%					
Aerosols	6,214	0.25%					
Antifreeze	1,308,628	52.74%					
Bases	5,312	0.21%					
Batteries	7,397	0.30%					
Chlorinated Solvents	540	0.02%					
Flammable Gases	560	0.02%					
Flammable Liquids	223,938	9.03%					
Flammable Solids	9,506	0.38%					
Mercury	635	0.03%					
Non-regulated liquids	501,758	20.22%					Non-regulated liquids = soaps and other materials sent for treatment and discharge to WW.
Organic Peroxides	198	0.01%					
Oxidizers	1,199	0.05%					
Paint- Latex	13,398	0.54%					
Paint -Oil Based	105,920	4.27%					Includes latex paint, although LHWMP does not collect from businesses and does not define as Hazardous
Pesticides	5,968	0.24%					
Photo Fixer	1,714	0.07%					
Reactive Waste	409	0.02%					
Used Oil	19,483	0.79%					
Other Dangerous Waste	259,848	10.47%					Excludes electronics
<b>Subtotal</b>	<b>2,481,286</b>	<b>100.00%</b>					checks
<b>Tons collected</b>	<b>1,241</b>						
<b>Disposition Method</b>	<b>Pounds</b>	<b>Percent</b>					
Recycled	1,497,888	60.37%					
Energy Recovery	152,394	6.14%					
Treated	403,683	16.27%					
Wastewater	186,703	7.52%					
Hazardous Waste TSD	26,880	1.08%					
Incinerated	17,767	0.72%					
Solid Waste Landfill	195,971	7.90%					
<b>Total</b>	<b>2,481,286</b>	<b>100.00%</b>					Excludes electronics





CESQG - Total Pounds Collected for King County in 2008 (Ecology Data)

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Waste Types	Antifreeze (Rec)	Oil non-contaminated (Rec)	Oil - contaminated (HW)	Oil - contaminated (ER)	Aerosols - consumer commodities (ER)	Aerosols - consumer commodities (HW)	Aerosols - consumer commodities (Other)	Acids (T)	Acids (WW)	Acids (Other)	Bases (T)	Totals
1													
2	S Seattle	183	1,284			229			1,079			193	2,968
3	Factoria	182	996			7			506			448	2,139
4	Wastemobile	8	456						121			325	910
5	Emerald	1,307,655		11,190			2,946						1,321,791
6	PSC - Kent				3,345			495		1,761	1,568	200	7,369
7	PSC Georgetown/Kent Collection events	600			2,212			2,537		3,626			8,975
8	<b>KC Totals</b>	<b>1,308,628</b>	<b>2,736</b>	<b>11,190</b>	<b>5,557</b>	<b>236</b>	<b>2,946</b>	<b>3,032</b>	<b>1,706</b>	<b>5,387</b>	<b>1,568</b>	<b>1,166</b>	<b>1,344,152</b>
9													
	Waste Types	Bases (WW)	Bases (Other)	Batteries-auto lead acid (Rec)	Batteries - Small Lead Acid (Rec)	Batteries- Nicad/Lithium (Rec)	Batteries- alkaline/ carbon (Rec)	Batteries- alkaline/ carbon (HW)	Batteries- alkaline/ carbon (S)	Chlorinated solvents (ER)	Electronics (Rec)	CRTs (Rec)	
10													
11	S Seattle			113		12				80			205
12	Factoria			188		1			44	460			693
13	Wastemobile			188									188
14	Emerald				4,136			90					4,226
15	PSC - Kent	209	475	163		25	300		40		1,000		2,212
16	PSC Georgetown/Kent Collection events	3,462		1,289		362		446				39,050	44,609
17	<b>KC Totals</b>	<b>3,671</b>	<b>475</b>	<b>1,941</b>	<b>4,136</b>	<b>400</b>	<b>300</b>	<b>536</b>	<b>84</b>	<b>540</b>	<b>1,000</b>	<b>39,050</b>	<b>52,133</b>
18													
	Waste Types	Flammable Solids (ER)	Flammable Solids (HW)	Flammable Solids (Other)	Flammable Liquids (Rec)	Flammable Liquids (ER)	Flamm Liquid Poison (Other)	Flamm Liquid Aerosols (Other)	Flamm Gas Poison (ER)	Flamm Butane/ Propane (ER)	Mercury- fluorescents/ cfls/tubes (Rec)	Mercury - thermometers/ thermostats (Rec)	
19													
20	S Seattle					4,313				360			4,673
21	Factoria	5				5,076		7	60	140			5,288
22	Wastemobile	15				1,035							1,050
23	Emerald		7,971		176,462								184,433
24	PSC - Kent			10		28,504	1,331				0.03	0.90	29,846
25	PSC Georgetown/Kent Collection events			1,505		7,210					0.03	0.42	8,715
26	<b>KC Totals</b>	<b>20</b>	<b>7,971</b>	<b>1,515</b>	<b>176,462</b>	<b>46,138</b>	<b>1,331</b>	<b>7</b>	<b>60</b>	<b>500</b>	<b>0.06</b>	<b>1.32</b>	<b>234,005</b>

**CESQG - Total Pounds Collected for King County in 2008 (Ecology Data)**

	A	B	C	D	E	F	G	H	I	J	K	L	M
27													
	Waste Types	Mercury - Pure (Rec)	Mercury Compounds - Amalgam (Rec)	Non-Regulated Liquids (T)	Non-Regulated Liquids (WW)	Organic Peroxides (HW)	Organic Peroxides (Other)	Oxidizers (HW)	Oxidizers (T)	Oxidizers (Other)	Paint - latex (T)	Paint - latex contaminated (T)	Totals
28	S Seattle			1,818		16		104					1,938
29	Factoria	1							25				26
30	Wastemobile								558				558
31	Emerald												0
32	PSC - Kent	1		304,885	176,716		22			109		2,110	483,843
33	PSC Georgetown/Kent Collection events		632	18,339			160		163	240	11,288		30,822
34	<b>KC Totals</b>	<b>2</b>	<b>632</b>	<b>325,042</b>	<b>176,716</b>	<b>16</b>	<b>182</b>	<b>104</b>	<b>746</b>	<b>349</b>	<b>11,288</b>	<b>2,110</b>	<b>517,187</b>
	Waste Types	Paint - oil base (Rec)	Paint - oil base (ER)	Paint - oil base (HW)	Pesticides - Poison/ Liquid (Other)	Pesticides - Poison/Solids (Other)	Photo/Silver Fixer (Rec)	Photo/Silver Fixer (Other)	Reactivities (Other)	Other DW (HW)	Other DW (S)		
36	S Seattle		27,662		398	40		288					28,388
37	Factoria		9,170		706	65		756					10,697
38	Wastemobile	2,560			590	24							3,174
39	Emerald			3,997						120			4,117
40	PSC - Kent				70		70			409		195,887	196,436
41	PSC Georgetown/Kent Collection events		62,531			4,075		600					67,206
42	<b>KC Totals</b>	<b>2,560</b>	<b>99,363</b>	<b>3,997</b>	<b>1,764</b>	<b>4,204</b>	<b>70</b>	<b>1,644</b>	<b>0</b>	<b>409</b>	<b>120</b>	<b>195,887</b>	<b>310,018</b>
43													
44	Waste Types	Other DW (T)	Other DW (WW)	Other DW (Other)					Totals Collected	Liz's Totals	Materials recycled	Participants	
45	S Seattle								38,172	38,172	0	148	0
46	Factoria								18,843	18,843	0	108	0
47	Wastemobile								5,880	5,880		22	0
48	Emerald								1,514,567	1,514,567	0	640	0
49	PSC - Kent	61,625	929	1,287					783,546	783,547	70	114	63,841
50	PSC Georgetown/Kent Collection events								160,327	160,327		750	0
51	<b>KC Totals</b>	<b>61,625</b>	<b>929</b>	<b>1,287</b>					<b>2,521,335</b>	<b>2,521,336</b>	<b>70</b>	<b>1,782</b>	<b>63,841</b>
52													

CESQG - Total Pounds Collected for King County in 2008 (Ecology Data)

	A	B	C	D	E	F	G	H	I	J	K	L	M
53													
54		Key for Waste Disposition:								checks within 1			
55		Reused = Reused										Totals	
56		Rec = Recycled										S Seattle	38,172
57		ER = Energy Recovery										Factoria	18,843
58		T = treated then sent to a SW Landfill										Wastemobile	5,880
59		WW = Wastewater disposal with or without Pretreatment Processing										Emerald	1,514,567
60		HW = HW Landfill or TSD										PSC - Kent	783,547
61		S = Disposal at a SW Landfill without Treatment										SQG Drop-off	160,327
62													2,521,336
63													
64													
65													
66													
67													
68													
69		Antifreeze	1,308,628		1,308,628								1,308,628
70													
71		Oil - noncontaminated	2,736	0.11%	2,736								2,736
72		Oil - contaminated - HW	11,190	0.45%					11,190				11,190
73		Oil - contaminated - ER	5,557	0.22%	5,557								5,557
74		Total pounds of oil	19,483	0.79%									19,483
75													
76		erosols - consumer - ER	236	0.01%	236								236
77		erosols - consumer -HW	2,946	0.12%				2,946					2,946
78		rosols - consumer -Other	3032	0.12%						3032			3,032
79		total pounds of aerosols	6,214	0.25%									6,214
80													
81		Acids - Treated	1,706	0.07%	1,706								1,706
82		Acids - WW	5,387	0.22%				5,387					5,387
83		Acids - Other	1,568	0.06%						1,568			1,568
84		Total pounds of acids	8,661	0.35%									8,661
85													
86		Bases - T	1,166	0.05%	1,166								1,166
87		Bases - WW	3,671	0.15%				3,671					3,671
88		Bases - Other	475	0.02%						475			475
89		Total pounds of bases	5,312	0.21%									5,312
90													
91		ries - auto lead acid- rec	1,941	0.08%	1,941								1,941
92		is - Small Lead Acid - rec	4,136	0.17%	4,136								4,136
93		Batteries - NiCad/Lithium	400	0.02%	400								400
94		ps - Carbon/alkaline -Rec	300	0.01%	300								300
95		ps - Carbon/alkaline -HW	536	0.02%					536				536
96		ps - Carbon/alkaline -SW	84	0.00%							84		84
97		total pounds of batteries	7,397	0.30%									7,397
98													
99		Chlorinated Solvents	540	0.02%	540								540
100													
101		Electronics - R	1,000		1,000								1,000
102		CRTS (Rec)	39,050		39,050								39,050

CESQG - Total Pounds Collected for King County in 2008 (Ecology Data)

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Waste Stream	Pounds Collected	of Waste Stream	# Reused	# Recycled	Energy Recovered	# Treated	# WW	# HW or TSD	Other	# SW	Total	
103													
104													
105	Flammable solids - ER	20	0.00%		20							20	
106	Flammable solids - HW	7,971	0.32%						7,971			7,971	
107	Flammable solids - Other	1,515	0.06%							1,515		1,515	
108	<b>Flammable solids</b>	<b>9,506</b>	<b>0.38%</b>									<b>9,506</b>	
109													
110	Flammable liquids - Rec	176,462	7.11%		176,462							176,462	
111	Flammable liquids - ER	46,138	1.86%			46,138						46,138	
112	Flammable liquids (other)	1,331	0.05%							1,331		1,331	
113	Poison - aerosols (other)	7	0.00%							7		7	
114	<b>Flammable liquids</b>	<b>223,938</b>	<b>9.03%</b>									<b>223,938</b>	
115													
116	Inflammable Gas Poison - ER	60	0.00%			60						60	
117	Inflammable Butane/Propane -ER	500	0.02%			500						500	
118	<b>Inflammable gases</b>	<b>560</b>	<b>0.02%</b>									<b>560</b>	
119													
120	fluorocarbon/CFCS/tubes	0.06	0.00%		0.06							0.06	
121	Mercury thermostats	1.32	0.00%		1.32							1.32	
122	Mercury (pure)	2.00	0.00%		2							2	
123	Amalgam (Rec)	632	0.03%		632							632	
124	<b>Total pounds of mercury</b>	<b>635.38</b>	<b>0.03%</b>									<b>635</b>	
125													
126	Non-regulated liquids - T	325,042	13.10%				325,042					325,042	
127	Non-regulated liquids - WW	176,716	7.12%					176,716				176,716	
128	<b>Non-regulated liquids</b>	<b>501,758</b>	<b>20.22%</b>									<b>501,758</b>	
129													
130	Organic peroxides - HW	16	0.00%						16			16	
131	Organic peroxides - Other	182	0.01%							182		182	
132	<b>Organic peroxides</b>	<b>198</b>	<b>0.01%</b>									<b>198</b>	
133													
134	Oxidizers - HW	104	0.00%						104			104	
135	Oxidizers - T	746	0.03%				746					746	
136	Oxidizers - Other	349	0.01%							349		349	
137	<b>Total pounds of oxidizers</b>	<b>1,199</b>	<b>0.05%</b>									<b>1,199</b>	
138													
139	Latex Paint - Treated	11,288	0.45%				11,288					11,288	
140	Latex paint - latex contaminated	2,110	0.09%				2,110					2,110	
141	Paint - oil-based - Rec	2,560	0.10%		2,560							2,560	
142	Paint - oil based - ER	99,363	4.00%			99,363						99,363	
143	Paint - oil based - HW	3,997	0.16%						3,997			3,997	
144	<b>Total pounds of paint</b>	<b>119,318</b>	<b>4.81%</b>									<b>119,318</b>	
145													
146	Poison/Liquid - other	1,764	0.07%							1,764		1,764	
147	Poison/Solid - other	4,204	0.17%							4,204		4,204	
148	<b>Total pounds of liquid pesticides</b>	<b>5,968</b>	<b>0.24%</b>									<b>5,968</b>	

CESQG - Total Pounds Collected for King County in 2008 (Ecology Data)

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Waste Stream	Pounds Collected	of Waste Stream	# Reused	# Recycled	Energy Recovered	# Treated	# WW	# HW or TSD	Other	# SW	Total	
149													
150													
151	Photo/silver fixer - rec	70	0.00%		70							70	
152	Photo/Silver fixer - Other	1,644	0.07%							1,644		1,644	
153	<b>Total pounds of phot fixer</b>	<b>1,714</b>	<b>0.07%</b>									<b>1,714</b>	
154													
155	<b>Reactives -other</b>	<b>409</b>	<b>0.02%</b>							409		<b>409</b>	
156													
157	Other DW - HW	120	0.00%						120			120	
158	Other DW - SW	195,887	7.89%								195,887	195,887	
159	Other DW - T	61,625	2.48%				61,625					61,625	
160	Other DW - WW	929	0.04%					929				929	
161	Other DW - Other	1,287	0.05%							1,287		1,287	
162	<b>Total pounds of other DW</b>	<b>259,848</b>	<b>10.47%</b>									<b>259,848</b>	
163													
164													
165	<b>Total pounds collected</b>	<b>2,521,336</b>		<b>0</b>	<b>1,537,938</b>	<b>152,394</b>	<b>403,683</b>	<b>186,703</b>	<b>26,880</b>	<b>17,767</b>	<b>195,971</b>	<b>2,521,336</b>	
166	Total checks										checks across	<b>2,521,336</b>	
167													
168	<b>Total tons collected</b>	<b>1,261</b>											
169													
170													
171													
172	<b>Out Electronics &amp; CRTs</b>	<b>2,481,286</b>	<b>100.00%</b>		<b>1,497,888</b>	<b>152,394</b>	<b>403,683</b>	<b>186,703</b>	<b>26,880</b>	<b>17,767</b>	<b>195,971</b>	<b>2,481,286</b>	
173													
174	<b>Revised tons collected</b>	<b>1,241</b>			749	76	202	93	13	9	98	<b>2,481,286</b>	checks across
175													
176					<b>60.4%</b>	<b>6.1%</b>	<b>16.3%</b>	<b>7.5%</b>	<b>1.1%</b>	<b>0.7%</b>	<b>7.9%</b>	<b>100.0%</b>	
177													
178													
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## Local Hazardous Waste Management Program in King County: 2009 Waste Acceptance Policies

Waste Acceptance Policies are constantly being updated. This appendix contains materials and waste acceptance policies as they stood in 2009. It also contains information that currently is provided to potential customers.

### Residential Waste Acceptance Policies and information

King County residents are encouraged to bring in a wide variety of hazardous wastes for HHW Collection. Wastes that are accepted include:

#### Hazardous Wastes Accepted from King County Residents

What To Bring	Wastemobile	Seattle	Factoria
Aerosol cans (if not empty)	X	X	X
Automobile batteries (limit of five)	X	X	X
Automobile products (antifreeze, brake fluid, gasoline, oil)	X	X	X
Batteries (except alkaline they can be treated as garbage, see below)	X	X	X
fluorescent light bulbs & tubes	X	X	X
Gasoline (30 gallon limit)	X	X	X
Glues and adhesives	X	X	X
Household cleaners (ammonia, bleach)	X	X	X
Hobby chemicals	X	X	X
Oil-based paints	X	X	X
Pesticides and Garden Chemicals	X	X	X
Products that contain mercury (fluorescent lamps, thermometers, thermostats)	X	X	X
Pool and spa supplies	X	X	X
Propane tanks (5 gallon maximum)	X	X	X
Road flares	X	X	X
Thinners and solvents	X	X	X

As of February 2010 all of the HHW sites have the following maximum quantity limits

- Gasoline - 30 gallons.
- Total waste - 50 gallons per customer per day.
- Fluorescent tubes or bulbs (not accepted from businesses) – limit 10.

## Local Hazardous Waste Management Program in King County: 2009 Waste Acceptance Policies

- Automotive batteries - limit 5.

Residents with larger quantities or unusual wastes may be allowed to bring the wastes in (to all sites except Factoria) if they receive permission to do so. There are no exceptions to the daily limits at the Factoria site due to space constraints. Residents are directed to call the Household Hazards Line to obtain permission.

The following wastes are **not accepted** from residents. Information about what to do with them is listed on the Program's Web site.

### Problem Wastes that the Program Does Not Accept from Residents

<b>What NOT to Bring</b> Do not bring these items to the Auburn Supermall Wastemobile, the regular Wastemobile, the Seattle, or Factoria collection sites:	
Containers of household hazardous waste over 5 gallons	Garbage
Aerosol cans ( <b>empty</b> )	Latex paint
Alkaline batteries	Medical wastes ( <b>including sharps</b> )
Biological wastes	Medications
Bullets, munitions, gunpowder, fireworks, etc.	Oil-contaminated soil
Computers	Paint brushes and empty paint cans
Empty containers	Smoke detectors, radioactive wastes
Explosives	Televisions
	Tires

### SQG Waste Acceptance Policies and information:

The Program's SQG collection policies are intended to encourage participation by businesses and other SQGs that periodically generate very small volumes of waste. The Program also intends to support development of a product stewardship model for managing fluorescent lamps. The Program currently is modifying its SQG Waste Acceptance policies.

In order to participate in the SQG Pilot Project, SQGs must bring in completed waste inventory forms and agree to be surveyed following their visit. In some cases they must prepare the materials in certain ways prior to bringing them into a Program facility. These requirements are specified on the Program's Web site. Information can also be obtained by calling the Program's Business Waste Line.



## Local Hazardous Waste Management Program in King County: 2009 Waste Acceptance Policies

SQGs are encouraged to bring small volumes of low and moderate risk hazardous wastes that are routinely collected at the MRW facilities/sites. Wastes that are accepted are listed below.

### Hazardous Wastes Accepted from King County Small Quantity Generators in February 2010

What To Bring	Wastemobile	Seattle	Factoria
Automotive products (cleaners, degreasers, oil, grease)	X	X	X
Batteries (limited to five standard automotive and no oversized batteries).	X	X	X
Consumer pesticides and herbicides (over-the-counter pesticides that do not require an applicator license.)	X	X	X
Corrosives (limited to one gallon of hydrofluoric acid mixtures; nitric acid cannot exceed 75 percent strength.	X	X	X
Flammable solids, such as road flares (no aerial flares)	X	X	X
<b>Gasoline (30 gallon limit)</b>	X	X	X
Mercury-containing products (including thermostats, thermometers and switches) except fluorescent tubes and bulbs.	X	X	X
Oil-based paints and stains (including used thinners)	X	X	X
Oxidizers (no peroxides that exceed 60 percent strength)	X	X	X
Paint-related materials (caulks, tars, etc.)	X	X	X
Solvents (chlorinated and non-chlorinated). Keep chlorinated solvents separate and properly labeled.)	X	X	X

As of February 2010 all of the MRW sites have the following maximum quantity limits and container requirements:

- Containers must be 5 gallons or less and weigh less than 60 lbs. each.
- Gasoline is limited to 30 gallons per visit in no larger than 5 gallon cans.
- All containers are counted as full, whether they are partially full or not.
- There is a 50 gallon limit per business per day.

Program staff are in the process of modifying the acceptance requirements.

The following table lists the types of wastes are not accepted from SQGs. In addition the Program does not accept unknown and unlabeled wastes and reserves the right to refuse any waste at any of its facilities.

## Local Hazardous Waste Management Program in King County: 2009 Waste Acceptance Policies

### Wastes that the Program Does Not Accept from Small Quantity Generators

<b>What NOT to Bring</b> Do not bring these items to the Auburn Supermall Wastemobile, the regular Wastemobile, the Seattle, or Factoria collection sites:	
unknown and unlabeled wastes	fluorescent tubes and bulbs
more than 2.2 lbs. of extremely hazardous waste (waste with a 2.2 .pound "quantity exclusion limit")	high pressure compressed gas cylinders larger than one liter
aerial flares	latex paint
ammunition	medical sharps and pharmaceutical wastes
asbestos-containing materials	nitric acid over 75 percent strength
commercial grade pesticides and herbicides (for example, agricultural chemicals)	non-hazardous waste
contaminated soils	oversized batteries
empty containers	peroxides over 60 percent strength or potentially unstable peroxides, such as old cans of ether
explosives	pyrophoric or reactive materials (phosphorus, sodium metal)
fireworks	radioactive wastes
	television sets, computer monitors and other electronic devices

Waste acceptance policies are modified from time to time as needed. The Program's 2009 customer and waste acceptance policies are

**Local Hazardous Waste Management Program in King County: 2009 Waste Acceptance Policies**

**2009 Moderate Risk Waste Customer Acceptance Summary Matrix**

<b>Waste Type/Source</b>	<b>Is It Accepted?</b>	<b>Conditions</b>
<b>Source: Resident</b>		
Left in home by previous occupant	Y	Determine if it should be coded as SQG or HHW
Left over at residence from home improvement work (by occupant or contractor)	Y	
From relative's or neighbor's home	Y	
Illegally dumped HHW on residential property	Y	Only with approval/clearance
Paid Hauler with HHW	Y	Only if resident is present
Multifamily resident	Y	
<b>Source: Business or Organization</b>		
Acquired by code enforcement or other government agency from a household	Y	Only with approval/clearance
From charities, when found in donations from residents	Y	Only with approval and onsite consultation/audit
Condominium Associations	Y	
Real Estate Agents	Maybe	Only if left in vacant home; Approval/clearance required
From neighborhood clean-up or other organized collection event	Maybe	Generally discourage; approval/clearance required
Illegally dumped on business or government property.	Maybe	If government /business is SQG, only with preapproval/clearance
Acquired by business; landlord; property manager; or creditor from residence.	Yes	Preapproval/clearance required
Government	Maybe	If small city/government whose entire operation is an SQG; Preapproval/clearance required

Version Dated: March 27, 2009

**Local Hazardous Waste Management Program in King County: 2009 Waste Acceptance Policies**

**MRW Waste Acceptance Summary Matrix- August 2009**

<b>Products / Materials</b>	<b>Accepted?</b>	<b>Conditions/Comments</b>
Ammunition	No	Take to local police station
Appliances with CFCs (Freon)	No	Refer to King County Solid Waste 206-296-4466 or Seattle Public Utilities at 206-684-3000 (press 3 and then press 1)
Asbestos	No	Refer to Puget Sound Clean Air Agency at (206) 343-8800
Batteries: Alkaline	No	Dispose in garbage. In King County collected from residents at recycling events.
Batteries: Automotive and Marine	Yes	Limit 5 per customer per visit without clearance
Batteries: Rechargeable, Button, Lithium	Yes	Inform customer of local retail stores (Radio Shack, Best Buy, etc.) that take rechargeable batteries ( <a href="http://www.rbrc.org">www.rbrc.org</a> )
Batteries: Appliances (toothbrush, etc.)	Yes	Customer to remove battery and discard or recycle appliance
Contaminated soils	No	Refer to Household Hazards Line; 206-296-4692
Electronic equipment	No	Provide 'Take It Back' brochure or 1-800-recycle
Fire Extinguishers	Yes	If empty may be disposed in garbage
Fireworks	No	Take to local police station
Flares with explosive propellant (e.g., pistol flares)	No	Refer to Household Hazards Line; 206-296-4692
Fluorescent lights	Maybe	'Household only'. Limit of 10 bulbs per customer per visit. Provide customer w/ 'Take it Back' brochure
Gas cylinders > 1 liter – Helium, welding tanks, etc.	Maybe	Only with clearance. Encourage return to supplier when feasible.
Gasoline	Yes	Factoria HHW cannot return gas can. 30 gallon limit. Must be in approved safety can labeled "gasoline"
Home Heating Oil	Yes	
Latex Paint and Stains	No	Have customer harden with kitty litter and dispose in trash with lid off can
Lead Paint Debris	Yes	Only with clearance; soil not accepted

**Local Hazardous Waste Management Program in King County: 2009 Waste Acceptance Policies**

<b>Products / Materials</b>	<b>Accepted?</b>	<b>Conditions/Comments</b>
Medicines and medical wastes	No	Refer to Household Hazards Line; 206-296-4692 or <a href="http://www.medicinereturn.com">www.medicinereturn.com</a>
Metal etching chemicals	Yes	Clearance required for hydrofluoric acid and cyanide compounds. Place immediately in secondary container.
Photo Processing Chemicals	Yes	Refer routine generators to Yellow Book (see below)
Propane cylinders	Yes	< 7 gallon or clearance required
Radioactive materials	Maybe	'Household only'; Store in lead container and contact WA DOH
Smoke Detectors	No	Remove battery and dispose of in garbage.
Treated wood	No	Can be disposed in garbage

Notes:

- 1) If you cannot answer a question refer the customer to the Household Hazards Line at (206) 296-4692.
- 2) Quantity limits are as follows: 50 gallon limit per customer per day at all facilities except that GASOLINE is limited to 30 gallons per day. Container size must be 5 gallons or smaller – larger containers need clearance.
- 3) Acceptance of unusual chemicals not listed in this matrix such as laboratory reagents requires clearance.
- 4) Yellow Book lists many disposal/recycling options for business hazardous wastes- Refer to Business Waste Line at 206-263-8899 or <http://www.lhwmp.org/home/YellowBook/index.aspx>

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## **Solid Waste Composition Data**

Seattle Public Utilities and King County Solid Waste Division conduct regular studies on the make-up of residential and commercial garbage, and construction, demolition and land clearing (CDL) waste. Waste composition studies provide snapshots of what people are throwing away over time. They provide information about the overall effectiveness of recycling, diversion and public outreach programs. They provide insight into the behavior of single family and multifamily households, residential and non-residential self-haulers, different industry sectors, and others.

The Local Hazardous Waste Management Program in King County uses these studies to monitor the presences of hazardous waste in the solid waste stream. This appendix describes the methodology used to calculate the tons of moderate risk waste over time and provides links to the documents themselves.

### **A. Overview**

Between 2002 and 2008, Seattle and King County conducted six solid waste composition studies. Seattle conducts its studies every two years, and alternates between residential and commercial/self haul waste stream assessments. King County conducts studies less frequently, but evaluates all aspects of the waste stream at the same time (residential, commercial and self-haul).

It is challenging to interpret the results of these studies with respect to moderate risk waste for the following reasons:

- There are differences in the ways that the two agencies define “hazardous waste”; both include items that are not managed by the Local Hazardous Waste Program (.e.g. medical wastes and electronic products).
- Since hazardous waste generally constitutes less than 1% of the solid waste stream it is difficult to reliably assess the behavior of sub-populations within the study. Obtaining more precise results would be very costly.
- These studies capture “hazardous waste” in the waste stream. Although most of the hazardous waste appears to come from residential sources, it is not possible to determine whether the nonresidential portion comes from small quantity generators (SQGs) or from regulated businesses.

### **B. Methodology**

Program staff reviewed each solid waste characterization study, paying particular attention to the detailed tables that list the types and quantities of waste sampled, including the lists of hazardous waste. The list of hazardous materials was standardized; medical wastes and electronic products were subtracted from the totals. This generally lowered the hazardous waste tonnage substantially.

## Solid Waste Composition Data

Both utilities track latex paint in the garbage. This analysis includes the latex paint tonnage since the Program collected latex paint through 2007. However future assessments will need to remove this from LHWMP calculations.

### C. Links to the Waste Characterization Reports

As of February 2010 the solid waste characterization studies summarized in the 2010 LHWMP Plan Update are available on the Web sites for King County Solid Waste Division and Seattle Public Utilities.

- **King County Solid Waste Division's general list of reports:**  
[http://your.kingcounty.gov/solidwaste/about/waste\\_documents.asp](http://your.kingcounty.gov/solidwaste/about/waste_documents.asp)
- **Seattle Public Utilities list of waste composition reports:**  
[http://www.seattle.gov/util/About\\_SPU/Garbage\\_System/Reports/Waste\\_Composition\\_Reports/index.asp](http://www.seattle.gov/util/About_SPU/Garbage_System/Reports/Waste_Composition_Reports/index.asp)

The two King County solid waste characterization studies cited in the Plan Update can be found at the following sites:

- **2007 Waste Characterization Study and Technical Appendices**  
<http://your.kingcounty.gov/solidwaste/about/documents/waste-characterization-study-2007.pdf>  
<http://your.kingcounty.gov/solidwaste/about/documents/waste-characterization-study-2007-appendices.pdf>
- **2003 Waste Characterization Study**  
<http://your.kingcounty.gov/solidwaste/about/documents/2003wastecharacter-survey.PDF>

The four Seattle solid waste characterization studies cited in the Plan Update can be found at the following sites:

- **Seattle 2008 Commercial and Self-Haul Waste Composition Study:**  
[http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/spu01\\_006148.pdf](http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/spu01_006148.pdf)
- **Seattle 2006 Residential Waste Composition Study**  
[http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/spu01\\_003427.pdf](http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/spu01_003427.pdf)
- **Seattle 2004 Commercial and Self-Haul Waste Composition Study:**  
[http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/cos\\_005398.pdf](http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/cos_005398.pdf)
- **Seattle 2002 Residential Waste Composition Study**  
[http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/cos\\_002503.pdf](http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/cos_002503.pdf)

## **Appendix C 6: Solid Waste Composition Data**

### **D. For Additional Information**

For additional information about the moderate risk waste calculations used in the Plan Update, contact:

The Office of the Program Administrator  
Local Hazardous Waste Management Program in King County  
150 Nickerson Street, Suite 100  
Seattle, WA 98109  
206-284-7974

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# Appendix

## D

### 2007 - 2008 Household Hazardous Waste Service Level Study

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

**2007 – 2008 Household  
Hazardous Waste Service  
Level Study**

**February 2010**

This report 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.

For more information or to order additional copies of this report contact:

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[www.lhwmp.org](http://www.lhwmp.org)

Tennant, Liz et. al., *2007-2008 Household Hazardous Waste Service Level Study*, Seattle, WA:  
Local Hazardous Waste Management Program in King County, February 2010.

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### Alternate Formats Available

Voice: 206-284-7974 or TTY Relay: 711



## 1. Introduction and Background

### 1.1. Introduction

In December 2006, the Local Hazardous Waste Management Program in King County (LHWMP or the Program) adopted a new strategic plan that changed the emphasis of many of its services. The new plan called for an assessment of current Household Hazardous Waste (HHW) collection services and future regional needs.<sup>1</sup> The goal of the planning effort was to develop recommendations regarding:

- The level and mix of fixed and mobile HHW collection services (including homebound)
- Ways to increase use of Program HHW collection services by multi-family residents
- Whether to pilot collection services in low-income and ethnic communities in Seattle and King County.

A multi-jurisdictional study group was assembled and met regularly from March 2007 through November 2008. The Household Hazardous Waste (HHW) Service Level Study Work Group included two representatives each from Seattle and King County, one from the City of Federal Way, and the Program's Strategic Advisor. Work Group members brought a combination of operational and policy expertise to the deliberations.<sup>2</sup> This report summarizes the Work Group's findings and recommendations.

### 1.2. Background

From the time that the Local Hazardous Waste Management Plan was adopted in November, 1990 there has been tension between the desire to provide convenient HHW collection service and the need to invest in public outreach and other activities to promote less use of hazardous materials.

- The 1990 Adopted Plan called for the establishment of six permanent HHW collection facilities "for easy access to major population centers (within ten miles)," supplemented by three mobile HHW collection facilities.<sup>3</sup> The South Seattle facility was already open when the Plan was adopted; the North Seattle facility opened in 1992. At that time the collection system consisted of two permanent collection facilities in Seattle and a traveling Wastemobile to serve areas outside of Seattle. The HHW collection system was not expanded further for a variety of reasons.

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<sup>1</sup> Household Hazardous Waste (HHW) is hazardous waste that is generated by individuals or households, rather than businesses or institutions. Many consumer products contain hazardous materials and must be disposed of as HHW.

<sup>2</sup> The HHW Service Level Study Work Group members are listed on page 28 under "Acknowledgements."

<sup>3</sup> Solid Waste Interlocal Forum, *Local Hazardous Waste Management Plan for Seattle-King County: Final Plan and Environmental Impact Statement for the Management of Small Quantities of Hazardous Waste in the Seattle-King County Region & Appendices A & B*, (Seattle: LHWMP, November, 1990), pages 3-18 and 3-19. Cited hereafter as *1990 Final Plan*.



- The 1997 Plan Update proposed to continue operating the two Seattle permanent collection facilities and the Wastemobile. These LHWMP-operated collection services were supplemented by Program funded city-operated HHW collection events, privately sector collection sites for targeted wastes, and efforts to promote private sector recycling of targeted wastes. The 1997 Plan Update also called for examination of “HHW collection service levels, needs and preferences in the suburban cities and unincorporated King County, and...the feasibility of enhancing service where deficiencies are identified.”<sup>4</sup>

The HHW Service Level Analysis, completed in 2000, concluded that residents in East King County and South King County did not have the same access to convenient collection service as did residents in and near Seattle. It recommended piloting a fixed HHW collection site in east King County in Bellevue (at the Factoria transfer station) and providing enhanced Wastemobile service in South King County.<sup>5</sup> The Management Coordination Committee approved the Phase II recommendations in July, 2000 and steps were taken to implement them.

- In October, 2002, the Factoria Transfer Station began accepting HHW four days per week. It proved to be very popular, and MCC authorized expanding the service to six days per week effective 2006.
- Wastemobile collection was offered on the first Saturday of every month in the cities of Federal Way (2001-2003) and Kent (2001-2002). Evaluation of these efforts found that they were less cost-effective than fixed collection or regular (roving) Wastemobile service.<sup>6</sup>

During the time that this HHW Service Level Study Work Group met, several additional service level changes were made, all of which affect customer numbers and service level and cost projections.

- The two Seattle facilities expanded the number of hours open to the public by an hour each day (mid- 2007).
- Test results showed that latex paint no longer designated as dangerous waste under WAC 173-303 and Public Health-Seattle & King County determined that solidified latex paint was acceptable for landfill disposal (2006).<sup>7</sup> The Program decided to stop paying for latex paint collection as of the end of 2007. The King County operated facilities (Factoria and the Wastemobile) stopped accepting latex paint in 2008. The two Seattle operated facilities stopped accepting latex paint in February 2009.
- The North Seattle HHW facility no longer required residents to schedule appointments (May 2008).
- The Program started accepting small quantity generator waste at the HHW collection facilities in South Seattle and Factoria and at the Wastemobile (February 2008).

<sup>4</sup> Local Hazardous Waste Management Program in King County, *Local Hazardous Waste Management Plan for King County, Final Plan*, (Seattle: LHWMP, May 1997), p. 5-13. Cited hereafter as *1997 Plan Update*.

<sup>5</sup> Local Hazardous Waste Management Program in King County, Memo from Phase II Household Hazardous Waste Service Level Study Group, to The Management Coordinating Committee, subject: “Preliminary Findings and Recommendations Regarding Adjustments to Household Hazardous [Waste] Collection Services,” July 3, 2000, (Seattle, WA: LHWMP, July 2000).

<sup>6</sup> King County Solid Waste Division, *Evaluation of Service Level Enhancements in South King County*, February 2004, describes and assesses these efforts.

<sup>7</sup> Keiko Ii, *Latex Paint Waste Characterization*, (Seattle: Public Health- Seattle & King County, July 25, 2006).

- The two solid waste agencies were planning other solid waste facility upgrades and replacements that could affect HHW service delivery. King County Solid Waste was beginning design work on a new Bow Lake facility, which could include an HHW Collection facility. Seattle was beginning planning for rebuilding the South Seattle transfer station (and HHW facility). These developments offered an opportunity to rethink the level and distribution of HHW collection services.



**Factoria HHW Drop-Off Site**



**South Seattle HHW Collection Site**



**Wastemobile Collection Site**

## 2. Steps and Activities Undertaken

The Household Hazardous Waste Service Level Study Work Group members (Work Group) met regularly from March 2007 through November 2008. During this period Work Group members reviewed past service level studies, examined the current level of HHW collection service provided relative to the current and projected population, compared LHWMP's service level with that provided by other similar programs and developed recommendations regarding the level and mix of HHW collection services in King County. These activities and steps are described below.

**Results are reported in the Findings section, beginning on page 8.**

1. **Work Group members developed a work plan.** They reviewed the study goals and desired outcomes, identified issues that should be addressed in the analysis, identified steps that would be taken, and established a timeline for key activities. The target completion date was December 1, 2007.

The work plan was generally followed and the elements identified in the work plan have been incorporated in this analysis. However due to reassignment of Program staff the analysis was not completed until November 2008.

2. **Work Group members documented and examined the Program's current level of HHW collection services.** Topics examined included:

- Hours, days and locations of current services.
- Materials collected.
- Demographic data about customers including household type, renter/owner, and distance traveled.
- The physical and operational state of existing facilities (e.g. is there excess capacity or are current facilities operating at full capacity? What is the physical state of each facility and what maintenance or upgrade work is needed and when?
- Cost data including cost per customer, cost per pound of materials processed, staffing costs, and total disposal costs.
- Comparison of mobile and fixed collection models.
- Comparison of the budgets for residential collection and public outreach budgets.

Initial analysis of collection site customers was modified as conditions changed and as additional data provided richer and more accurate information about the current level of service being provided.

Work Group members also agreed upon what criteria would be used in defining and evaluating service level.

3. **Work Group members gathered information about the level of collection service provided by program peers.** Work Group members compared LHWMP's overall service level with that of eight other programs that were roughly comparable in size (serving at least 1,000,000 residents) and hours (open at least 2,000 hours per year.). This benchmarking survey provided useful comparative information in terms of number of households in the service area, number of customers served, percent of households served, number of minutes

open per household, etc. This data is summarized in Findings, pages 9 and 14. Details can be found in Appendix B.

**4. Work Group members compiled and reviewed existing data and studies about the Program's facilities and service area.** These included:

- HHW collection studies and data from 1991 – 2006;
- The 1998 HHW Service Level Recommendations
- The 2000 HHW Service Level Recommendations
- The 2002 Component Review Observations and Findings with respect to Household Hazardous Waste collection services (1991-2000).
- Factoria performance and evaluation studies
- Wastemobile performance and evaluation studies
- Past on-site survey reports and data (primarily from the Wastemobile)
- Census data and other demographic data and projections for King County including counts of households (single family and multifamily), housing types and projections, household with limited English-speaking skills, percent of people living below the poverty level, etc.
- Solid waste composition studies for Seattle and King County.
- Financial data on past cost and, present HHW collection and disposal costs.

**5. Work Group members obtained and analyzed data where it was needed.** This included

- Obtaining **current customer feedback and data** through an on-site survey of 1,750 customers at the three fixed facilities and at two Wastemobile events in the summer of 2007.
- Obtaining **general public data and feedback** from 908 randomly selected residents as part of a general HHW telephone survey conducted in the fall of 2007.
- Using current customer **zip code data** (obtained in the 2007 on-site survey) to define current service areas and to develop maps around which to build options.
- Researching **homebound** collection programs around the country.
- Mining available data sources to better understand the demographics and distribution **multifamily residents** throughout King County, as well as their use of hazardous materials and disposal of hazardous wastes. Data sources included 2000 Census data, King County Annual Growth reports, Washington Finance Office demographic data and projections, waste composition studies, cross-tabs from the 2007 telephone survey and cross-tabs from the 2007 on-site customer survey.
- Mining available data sources to better understand the demographics and distribution **minority and immigrant communities** throughout King County and their use of hazardous materials and disposal of hazardous wastes. Data sources included 2000 Census data, King County Annual Growth reports, Washington Finance Office demographic data and projections, waste composition studies, cross-tabs from the 2007

telephone survey and cross-tabs from the 2007 on-site customer survey, and interviews with Program staff working on Environmental Justice issues.

**6. Work Group members identified and analyzed policy and operational issues affecting service levels.** These included:

- Operational differences between the Seattle and King County facilities, including ways to make them as consistent as possible (e.g., work towards being open similar hours).
- Waste acceptance policies
- Lack of clear capital policies and budgets for Program facilities.
- The potential for more collaboration on contracting issues.

**7. Work Group members assessed the level and distribution of HHW collection services throughout King County** using the information and analyses described above and the following service level criteria:

- Service proximity (distance)
- Service frequency
- Service equity
- Geographic distribution of services
- Other potentially underserved groups within the community (homebound, without cars, historically underserved populations.)
- Percent of households served per year
- Number of customers served per hour open
- Cost

Work Group members determined that a variety of service level enhancements are needed to provide more consistent and equitable HHW collection service throughout King County, provided that it is economically feasible.

**8. Work Group members developed Program-wide service level recommendations regarding overall service level targets** as well as specific steps that should be taken to provide more equitable service delivery throughout King County. Work Group members also identified and evaluated options for improving HHW collection service, particularly in underserved areas and for underserved groups. These included options for improving service delivery to the following underserved groups:

- Northeast King County residents;
- South King County residents;
- Targeted populations including homebound residents; apartment dwellers, and historically underserved populations.

Work Group members used demographic data, survey data and mapping data to define the service areas for the existing three fixed facilities and for the Wastemobile. Work Group members also identified geographic gaps in coverage and identified five options for improving



service delivery to residents in south King County, where the service gaps is the most evident: The options are described in the Findings section, pages 23 -25 and in Appendices E and F.

**9. The Work Group's recommendations were presented to the Management Coordination Committee (MCC) in September 2008.** MCC members were briefed on the overall service level recommendations, the South County options, and the proposed criteria for comparing the options. The presentation was greatly helped by maps that King County GIS developed for the Work Group. MCC members approved the general recommendations, the proposed service level criteria, and the proposed analytical process.

**10. Work Group members worked with the Program Administrator to compare the South County options** in terms of equity, efficiency, and cost using criteria very similar to the original service level criteria.

- **Equity** was measured in terms of service proximity, service frequency, increase in service to geographically undeserved areas/populations and how soon this option would be put into service.
- **Efficiency** was measured in terms of net increase of population serviced (to minimize the number of people served by multiple facilities), percent of households served per year, and number of customers served per hour open.
- **Cost** was measured in terms of total cost of the option.

The five options were compared using a multivariate ranking analysis. The Work Group members could not reach agreement on all of the assumptions underlying the analysis. However they were able to reach agreement about which option to recommend (adding regular collection service at the Auburn Supermall, at least on a pilot basis).

**11. The Auburn Supermall recommendation was presented to the MCC in November 2008.** MCC was briefed on the results of the multivariate analysis and the Work Group's recommendation to proceed with a two year pilot project with regular collection offered at the Auburn Supermall, provided that it would be financially sustainable. This was done with a reminder that the analysis must be considered in the context of the total Program cost, the cost of other collection service level enhancements, non-collection program costs and the Program's upcoming fee analysis and proposal.

MCC was asked for, and gave, conditional approval of the Auburn Supermall option, with the opportunity to reassess the cost of the Supermall option in 1<sup>st</sup>/2<sup>nd</sup> quarter 2009, along with the other Program costs (for the Program's total cost and the fee increase proposal).

It was noted if the two year Auburn Supermall pilot project is conducted, MCC will have an opportunity to revisit this issue with data and consider whether to:

- Continue the Supermall operations
- Move towards finding and establishing an ideal site or
- Whether to build another HHW facility at the Bow Lake transfer station (and close the South Seattle HHW Collection Site due to the overlap of service areas).

### 3. Findings

These findings were presented to the Management Coordination Committee in 2008 and draw primarily on 2007 data.

#### 1. The Local Hazardous Waste Management Program in King County currently provides approximately 5,338 hours of HHW collection service per year.

LHWMP funds the operation of three fixed household hazardous waste collection facilities. They are located in North Seattle, South Seattle and in the Factoria area in Bellevue. The two Seattle facilities are operated by Seattle Public Utilities. The Factoria facility is operated by King County Solid Waste Division. At least one fixed facility is open every day of the week. The fixed facilities operate year-round. They are open to all King County residents.

In addition, the Program provides mobile collection service through the Wastemobile, which visits areas outside of Seattle on a rotating basis between March and November. The Wastemobile operated 94 days in 2007. When the Wastemobile is operating the Program provides approximately 111 hours of service per week; when it is not, the Program's fixed facilities are open 90 hours per week.

Days and hours of operation are shown in Table 1.

<b>Table 1: Current HHW Collection Services (Status Quo) : Days and Hours of Operation in 2007</b>
<ul style="list-style-type: none"> <li>➤ <b>Operate three fixed facilities</b> <ul style="list-style-type: none"> <li>▪ Factoria (Bellevue) Drop-Off Site – open 6 days/wk (Tues – Sun), 8 hours per day</li> <li>▪ North Seattle Collection Facility – open 3 days/wk (Sun-Tues), 7 hours per day</li> <li>▪ South Seattle Collection Facility – open 3 days/wk (Thurs-Sat), 7 hours per day</li> </ul> </li> <li>➤ <b>Operate Wastemobile</b> – travels throughout King County, location varies           <ul style="list-style-type: none"> <li>▪ Approximately 31 events in 21 locations; open 94 days in 2007</li> <li>▪ Generally open 3 days /wk (Fri- Sun), 7 hours per day.</li> <li>▪ Operates nine- ten months per year February/March through November; location varies.</li> </ul> </li> <li>➤ <b>Collect HHW from homebound residents</b> upon request (not advertised)</li> <li>➤ <b>Supplemented by:</b> <ul style="list-style-type: none"> <li>▪ <b>Program funded suburban city collection events</b> – 46 events per year that collect limited subset of HHW; wastes collected vary from city to city. Usually combined with spring and fall recycling events.</li> <li>▪ <b>Private sector take-back options</b> (e.g. used motor oil, fluorescent lamps)</li> </ul> </li> </ul>

In 2007, the fixed facilities served about 64% of the Program's HHW collection customers (39,998 people) and collected 54% of the HHW brought in for proper disposal (1,606 tons).

The Wastemobile served 36% of the Program's 2007 HHW collection customers (21,852 people) and collected 46% of the Program's HHW.

## 2. LHWMP provides a lower level of service than many comparable programs.

When compared with eight other programs of similar size, LHWMP ranked **5/9** in the level of service provided, measured in the number of minutes open per household per year.

LHWMP was compared with eight other HHW collection programs serving communities of at least 1,000,000 residents and providing at least 2,000 hours of service per year. Comparisons were made with programs in Alameda County, CA, Hennepin County, MN, Montgomery County, MD, Orange County, CA, Pinellas County, FL, Portland-Metro, OR, San Bernardino, CA and the City of Los Angeles, CA.<sup>8</sup>

One way in which service level was measured was by comparing the amount of time service is available to residents in the service area, measured by number of service minutes open per household per year. In 2008 LHWMP provided an **overall service level of 0.41 service minutes** per household per year. As Table 2 shows, this rates five out of the nine Programs being compared.

<b>Table 2: Comparison of Number of Service Minutes Available Per Household Per Year</b>				
<b>Program</b>	<b># Households</b>	<b># Service Hours per Year</b>	<b># Service minutes per Household</b>	<b>Rank</b>
San Bernardino County, CA	528,839	5,632	.64	1
Hennepin County, MN	492,083	4,609	.56	2
Portland Metro, OR	553,000	4,646	.50	3
Montgomery, County MD	356,603	2,888	.49	4
<b>LHWMP</b>	<b>778,787</b>	<b>5,338</b>	<b>.41</b>	<b>5</b>
Orange County, CA	1,018,380	6,240	.37	6
Pinellas County, FL	481,573	2,934	.37	6
Alameda County, CA	535,000	2,232	.25	7
City of Los Angeles, CA	1,875,930	4,875	.16	8

The benchmarking survey also compared the percent of households served by the nine household hazardous waste collection programs. LHWMP again ranked **5/9**. See Appendix B for details.

<sup>8</sup> Jim Neely, King County Solid Waste Division, conducted the benchmarking survey and compiled the results. See Appendix B for additional data.



It should be noted that these programs vary in the types of waste that they accept. Several of the higher-ranking programs accept waste streams that LHWMP does not. For example, the Hennepin County (MN) and San Bernardino (CA) programs both accept electronic waste and latex paint. This has a bearing on the number of hours the facilities are open and, more importantly, the number of customers served.

### **3. LHWMP's current programs provide some level of convenient (proximate) service to most King County residents,**

Work Group members used 2007 survey zip code data to define the service areas for the fixed facilities and the Wastemobile. Work Group members concluded that the service areas should be based on the distance that 80% of the HHW customers actually drove to use the HHW collection sites. The **80% service area** was mapped for each fixed facility and the Wastemobile. This aligns with survey data regarding how far people report that they are willing to drive for collection service.<sup>9</sup>

Approximately **66% of the population** in King County lives within the boundaries of one or more of the three **fixed** HHW collection facilities. (Whether they are aware of the facilities is another issue.)

Approximately **33% of the population** in King County lives outside the fixed facility service area but is served by the **Wastemobile**. Depending on where they live, these residents may have convenient Wastemobile service 3 – 12 days per year.

Approximately **one percent** of the population, mostly living in rural areas, does not have easy access to the Wastemobile or a fixed facility.<sup>10</sup>

Additional, more limited service is provided through LHWMP-funded city-sponsored collection events. Also, used motor oil can be recycled at approximately 84 private collection sites located throughout King County. Used motor oil is also collected at Seattle's two recycling and disposal (transfer) stations, and it collected at curbside in some communities.

### **4. Access to convenient service varies by where in King County one lives.**

Service access was evaluated by examining the number of days and hours the facility/service was available to residents living in the service area and by calculating the number of service minutes available per household in the service area.

As Table 3 shows, service access varies from one service area to another. In general, residents in fixed facility service areas have significantly greater access to convenient service than do residents in Wastemobile-only collection areas (e.g. in South King County and in Northeast King County).

For example, residents living in one of the fixed facility service areas have access to relatively near-by HHW collection service at least three days per week, year round. In contrast, residents

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<sup>9</sup> See Gwen Vernon, Christy Shelton, and Jessica Branom-Zwick, *Household Hazardous Waste On-Site Survey, August-September 2007* (Seattle: Local Hazardous Waste Management Program in King County, December 2007), page 6 for analysis of willingness to drive data. Cited hereafter as *2007 On-Site Survey*.

<sup>10</sup> This analysis is based on the 2000 Census data used by King County GIS system. Since that time King County's population has grown by approximately 100,000 people, particularly in East and South King County.

living in areas served by the Wastemobile have relatively near-by collection 3 – 12 days per year during the eight months that the Wastemobile operates.

<b>Table 3: Access to HHW Collection Services by Facility and Wastemobile Service Area</b>					
	<b>Number of days open per week</b>	<b>Number of hours open per week</b>	<b>Number of days of service per year (in service area) *</b>	<b>Service minutes per household per year –2006 *</b>	<b>Service minutes per household per year –2007 *</b>
Factoria	6	48	312	0.55	0.55
Seattle - North	3	21	156	0.38	0.44
Seattle - South	3	21	156	0.22	0.26
Wastemobile	3 **	21 **	94 ** (location varies)	0.15 varies by location	0.15 varies by location
<b>Total</b>		<b>111</b>		<b>0.4</b>	<b>0.41</b>
Without Wastemobile		<b>90</b>	** Operates 8 months per year only (March to October)		
* Convenient access measured in days and hours open to residents living the service area and in service minutes per household living in the service area (total number of minutes per year divided by population in the service area). This is a measure of the level of service <i>available</i> to residents.					

On average, residents in the overall Wastemobile service area receive 0.15 minutes of service per household per year. This is approximately one third of the access available to residents in the North Seattle service area and approximately 27% of the access available to residents in the Factoria service area. However even this understates the service access in any given area, since the Wastemobile changes location and does not operate year round. For example in 2007 the Wastemobile visited the following sites for the number of days listed in Table 4:

<b>Table 4: 2007 Wastemobile Visits</b>	
<ul style="list-style-type: none"> <li>• Auburn (9 days)</li> <li>• Bothell/Kenmore (3 days)</li> <li>• Burien/SeaTac (6 days)</li> <li>• Covington area (3 days)</li> <li>• Des Moines (3 days)</li> <li>• Duvall (3 days)</li> <li>• Enumclaw (3 days)</li> <li>• Federal Way (12 days)</li> <li>• Issaquah (3 days)</li> <li>• Juanita/Kingsgate (3 days)</li> </ul>	<ul style="list-style-type: none"> <li>• Kent (12 days)</li> <li>• Maple Valley (3 days)</li> <li>• Redmond (7 days)</li> <li>• Renton (3 days)</li> <li>• Sammamish (3 days)</li> <li>• Shoreline (3 days)</li> <li>• Snoqualmie (3 days)</li> <li>• Tukwila (3 days)</li> <li>• Vashon (3 days)</li> <li>• Woodinville (6 days)</li> </ul> <p><b>94 Total Days of Service</b></p>

The actual level of Wastemobile service access varies according to frequency of Wastemobile visits and population density. The Wastemobile is scheduled based on population density. It generally visits all major population centers outside of the fixed facility service areas, visiting densely populated areas (e.g. Auburn, Federal Way and Kent) more frequently than less densely populated areas (e.g. the City of Snoqualmie). The number of service minutes available to residents in the Wastemobile service area varies according to where they live. For example, in 2007, the Wastemobile visited Des Moines for three days (0.10 service minutes per household per year), Enumclaw for three days (0.27 minutes per household per year), and Federal Way 12 days (0.14 minutes per household per year).

Residents in the Wastemobile service area did not have nearby HHW collection options during the four months that the Wastemobile was not operating (generally November – February).

The level of service access also differs among the three fixed facility service areas. For example, Factoria, which is open six days a week, provides substantially more access for the residents in its service area than do either of the Seattle facilities (both of which are open three days per week). In 2007, residents in the Factoria area had access of 0.55 minutes open per household, compared with 0.44 minutes per resident in the North Seattle service area and .26 minutes per resident in the South Seattle service area.

The one percent of residents who live outside of the Wastemobile service areas do not have convenient access to HHW collection service, aside from what may be provided through LHWMP-funded city operated collection events. These residents, can, of course, drive further than 10-12 miles and bring their HHW to the nearest collection facility or Wastemobile. These service gaps are primarily in rural areas (Northeast, East, and Southeast King County).

At the other end of the spectrum, some residents have easy access to more than one collection facility or service. For example Shoreline, Kirkland, Redmond, Renton, Tukwila and Normandy Park are served by the Wastemobile, even though they are in a fixed facility service area. Also, some residents in Seattle, Renton and Mercer Island are in the overlapping service areas of two or even three fixed facilities

See Appendix E, Maps 1 and 6 to see how HHW collection services currently are distributed.



**Wastemobile staff helping customers**

## 5. Fixed and mobile collection options offer different benefits.

From the outset LHWMP has operated both fixed and mobile HHW collection services. The features and constraints of these two types of service are summarized in Table 5.

<b>Table 5: Fixed vs. Mobile Collection Differences</b>	
<p style="text-align: center;"><b>Mobile Services (Wastemobile)</b></p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Service is Flexible/can be changed:               <ul style="list-style-type: none"> <li>– duration (number of days &amp; hours open)</li> <li>– number of events</li> <li>– location of events</li> </ul> </li> <li>• Visible &amp; popular service.</li> </ul> <p><b>Constraints:</b></p> <ul style="list-style-type: none"> <li>• Provides much less access time to area residents than fixed service.</li> <li>• Customers must plan their visit when the service is in their area.</li> <li>• Becoming harder to find host sites.</li> <li>• Must be set up and broken down for each event (which is costly.)</li> </ul>	<p style="text-align: center;"><b>Fixed Facilities</b></p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Fixed points of service and regular hours.</li> <li>• Operates year-round.</li> <li>• Customers can access the service as needed.</li> </ul> <p><b>Constraints:</b></p> <ul style="list-style-type: none"> <li>• Fixed location is not flexible.</li> <li>• Customers may have to drive farther.</li> </ul>

See Appendix D for more detailed comparison of fixed and mobile collection services.

## 6. Many residents are not aware of currently offered household hazardous waste collection services.

Program collection services are not widely advertised. Survey data indicates that many residents are not aware of the services. When interviewed in 2007, 40% of respondents (363/908) said that they had never used a household hazardous waste disposal site or the Wastemobile. Most (79%) of the 363 people who had never used the service said that the main reason that they had not used the service was that they were unfamiliar with where the sites are located. When responses are examined by ethnicity, it appears that a higher-proportion of the minority respondents had never used a hazardous waste disposal site or the Wastemobile (65%) and that a higher percent of those respondents (85%) don't know where any of the household hazardous waste sites are.<sup>11</sup>

<sup>11</sup> See EMC Research, *Local Hazardous Waste Management Program in King County Household Hazardous Waste survey: summary of Findings October- November 2007* (2007 Phone Survey Final Report.pdf), page 34 (Questions 58 and 59). Cited hereafter as *2007 Telephone Survey*. Also see Banner 3 for Responses by Ethnicity and discussion below on page 16.

The Homebound collection program has not been promoted. It relies on inquiries to the Household Hazards Line.

#### 7. LHWMP serves fewer households per year than many comparable programs.

As was noted on page 9, LHWMP was compared with eight other HHW collection programs serving communities of at least 1,000,000 residents and providing at least 2,000 hours of service per year. Table 6 shows that when compared with these eight other programs, LHWMP ranked **5/9** in the number of households it serves per year (2007 data).

<b>Table 6: Comparison of Number and Percent of Households Served in 2007</b>				
<b>Program</b>	<b># Households</b>	<b># of Customers</b>	<b>% of Households Served</b>	<b>Rank</b>
Hennepin County, MN	492,083	96,429	19.6 %	1
Montgomery, County MD	356,603	56,211	15.8%	2
Orange County, CA	1,018,380	109,470	10.7%	3
Portland Metro, OR	553,000	58,041	10.5%	4
<b>LHWMP</b>	<b>778,787</b>	<b>60,950</b>	<b>7.8%</b>	<b>5</b>
Pinellas County, FL	481,573	35,975	7.5%	6
San Bernardino County, CA	528,839	38,275	7.2 %	7
Alameda County, CA	535,000	25,483	4.8%	8
City of Los Angeles, CA	1,875,930	33,337	1.8%	9

These benchmarking results need to take into consideration that several of the higher-ranking programs accept waste streams that LHWMP does not. For example, the Hennepin County (MN) and San Bernardino (CA) programs both accept electronic waste and latex paint. This has a bearing on the number of households served. See Appendix B for additional details.

Table 7 provides additional details about the number of customers served and the number of service hours the Program provided during 2007. This does not reflect 5,338 service hours because the Seattle facilities added one hour of public service per day mid-way through 2007

<b>Table 7: Customers Served per Hour Open in 2007</b>			
<b>Facility</b>	<b># of Customers</b>	<b># Service Hours</b>	<b>Average # of Customers per Hr</b>
Factoria	21,345	2,496	8.6
North Seattle	6,541	1,014 <sup>12</sup>	6.5
South Seattle	11,212	1,014	11.1
Wastemobile	21,582	658	33.2
<b>Total</b>	<b>60,950</b>	<b>5,182</b>	<b>11.8</b>

In 2008, the number of households served by LHWMP decreased by almost two percentage points in the wake of LHWMP's decision to discontinue collection of latex paint. Factoria and the Wastemobile both experienced a sharp decline in the number of customers served and the amount of waste processed. Seattle, which was still accepting latex paint in 2008, saw an increase in the number of customers using its two facilities, perhaps due to the discontinuation of appointments for the north Seattle HHW collection facility. Overall LHWMP served 44,877 customers or 5.7% of King County households in 2008. It is unclear whether there will be a further decrease in households served when Seattle stops collecting latex paint in 2009.

#### **8. The Program's HHW collection services are not being used equally by all King County residents.**

Analysis of survey and demographic data indicates that Program collection services are not used by multifamily households and historically underserved communities to the extent that would be expected. The extent to which these groups overlap is unclear.

**Residents living in multifamily dwellings** use the HHW collection services far less than would be expected based on demographic and housing data. Only seven percent of customers surveyed in 2007 reported living in a multi-family residence, whereas multifamily units comprised 38% of the housing stock. The percentage of multifamily housing varies in cities and unincorporated areas throughout the County. For example in 2007 Beaux Arts Village had no multifamily households, whereas 52% of the City of Tukwila's housing was multifamily.<sup>13</sup>

Table 8 summarizes the results of the 2007 HHW On-Site and Telephone Surveys with respect to multi-family use of HHW collection services. It compares this use with demographic information about multifamily housing and households.

While multi-family residents use HHW services less, they also are thought to produce less HHW than single-family households. This is likely because multi-family residents do not paint or maintain the exterior surfaces of their houses, nor do they typically have yards to maintain. Residents who live in apartments generally have less responsibility for interior maintenance than do single family residents. In general terms, multifamily residents may have

<sup>12</sup> For the second half of 2007 the two Seattle facilities were open to the public one extra hour per day. By the end of 2007, each Seattle facility was offering 1,092 hours of service per year. However during 2007 they provided closer to 1,014 hours of service.

<sup>13</sup> Calculated from data on page 59, King County, *The 2008 Annual Growth Report*, (Seattle: King County Office of Management and Budget, 2008). King County's annual growth reports will be cited hereafter as *Year X Annual Growth Report*.

less disposable income than single family residents, and therefore lower participation in activities (ranging from car maintenance to hobbies) that typically generate HHW.

<b>Table 8: HHW Collection Facility Use in 2007 by Type of Residence</b>				
<b>Residence Type</b>	<b>% of customers (2007 On-Site Survey) n = 1,759</b>	<b>% reporting use (2007 Phone Survey) n = 908</b>	<b>% of Housing Units (2007) n = 812,658</b>	<b>% of households projected (2020) n = 895,109</b>
<b>Single Family</b>	<b>92%</b>	<b>78%</b>	<b>62%</b>	<b>59.5%</b>
Apartment	2%	13%		
Condominium	4%	4%		
Du/tri/four-plex	1%	2%		
<b>Total Multifamily</b>	<b>7 %</b>	<b>19%</b>	<b>38%</b>	<b>40.5%</b>
<b>Other</b>	<b>1%</b>	<b>3%</b>	Counted in SF	
<b>Total</b>	<b>100%<sup>14</sup></b>	<b>100%<sup>15</sup></b>	<b>100%<sup>16</sup></b>	<b>100%<sup>17</sup></b>

**Residents from historically underserved communities<sup>18</sup>** also use the HHW collection services far less than would be expected based on demographic data. The 2007 on-site survey of HHW customers confirmed that the HHW collection facilities are used more heavily by White/Caucasian residents and less by other ethnic groups than would be expected based on King County's overall demographics. Of the 1,444 customers who answered the optional ethnicity question, approximately 88% reported their ethnicity as White/Caucasian; 12% reported being of other race/ethnicity (five percent Asian/Pacific Islander, two percent Black/African American, one percent Hispanic/Latino, two percent mixed racial heritage, less than one percent Native American and one percent "other ethnicity,". These findings were similar across the HHW collection sites.<sup>19</sup>

The 2007 HHW Phone Survey had similar results. Over two thirds (68%) of White/ Caucasian respondents said that they had used a collection site at some time; less than one third (31%) of minority respondents reported having ever used a site. When analyzed further, this data shows

<sup>14</sup> 2007 On-Site Survey, p. 2.

<sup>15</sup> 2007 Telephone Survey, p. 38. Town homes are counted as single-family.

<sup>16</sup> Calculated from data on page 59, King County 2008 Annual Growth Report.

<sup>17</sup> Liz Tennant, "2007 Residential Service Level Study Demographic Analysis," Revised April 27, 2007. Uses 2006 demographic projections from the Puget Sound Regional Council.

<sup>18</sup> Historically underserved communities include people of color, immigrant populations who don't speak English or speak English-as-second language (ESL), homebound residents and people with disabilities (e.g. who are blind and/or deaf).

<sup>19</sup> 2007 On-Site Survey, p. 13.

that White/Caucasian residents were almost six times as likely to have used a collection site as were minority residents.<sup>20</sup>

<b>Table 9: HHW Collection Service Use in 2007 by Ethnicity/Race</b>			
<b>Customer Ethnicity</b>	<b>Percent of customers (2007 On-Site Survey) n = 1,444</b>	<b>Percent of respondents reporting use (2007 Phone Survey) n = 888</b>	<b>% of Population (2006, based on Census data)</b>
<b>White /Caucasian</b>	<b>87.6%</b>	<b>68%</b>	<b>69%</b>
Asian/Pacific Islander	5.4 %		14%
Black/African American	1.9 %		6%
Hispanic/Latino	1.4 %		7%
Mixed heritage	2.1 %		3%
Native American/Indian	0.2 %		1%
Other Ethnicity	1.4 %		.4%
<b>Subtotal</b>	<b>12.4 %</b>	<b>31%</b>	<b>31.4%</b>
<b>Total</b>	<b>100%<sup>21</sup></b>	<b>99%<sup>22</sup></b>	

## 9. Several other groups are potentially underserved by the Program.

The following groups do not have easy access to currently provided collection services.

**Residents who live outside of the current service area** in rural East King County do not have nearby access to HHW collection services. GIS data indicates that approximately one percent of King County residents are without reasonably nearby Wastemobile service. These residents have the option to drive to a Wastemobile event or to drop off their HHW at one of the three fixed HHW collection facilities.

The Town of Skykomish (population of 210 in 2007) is the only incorporated area in King County that lies outside of a fixed service area and does not receive Wastemobile service. The Town of Skykomish does not receive Wastemobile service because it is remote and the cost of service is high relative to the population that could use it. However, the Town of Skykomish receives approximately \$5,000 per year in LHWMP funding to operate its own moderate risk waste collection events.

<sup>20</sup> See *2007 Telephone Survey*, Banner 3 (Responses by Ethnicity). Analysis of this data shows that White/Caucasian respondents comprised 49.3% of the 58% total affirmative responses; minority respondents comprised 8.5% of the affirmative respondents. See Liz Tennant, Strategic Advisor, Local Hazardous Waste Management Program for details. The sample size of non-Caucasian respondents using the facilities was not large enough to reliably characterize subgroups.

<sup>21</sup> See *2007 On-Site Survey*, p. 13 and data described in that survey.

<sup>22</sup> See *2007 Telephone Survey*, Banner 3 (Responses by Ethnicity). This does not add up to 100% because of the respondents who didn't know whether they or a family member had ever used a collection facility.



**People who are homebound** probably are not aware that the Local Hazardous Waste Management Program staff will pick up their Household Hazardous Waste if they have no way to deliver it to an LHWMP facility. The intent of this program is to facilitate proper HHW management by residents who are disabled and cannot drive. However this service has not been advertised; the only way that people find out about it is by calling the Household Hazards Line with a question. The Program currently provides home collection by Program staff as a last resort...after much screening and only if the person requesting the assistance doesn't drive, doesn't have a car, and has no access to other assistance or other means of getting the waste to a collection facility.

In 2007, the Household Hazards Line received 18 calls from residents who met the criteria for needing homebound service. These calls were referred to Seattle's HHW Supervisor. Most (66%) of the calls were from Seattle residents; 34% were from residents elsewhere in King County.

LHWMP's homebound program currently serves a small portion of the people who might benefit from home collection. Approximately 10.5 percent (181,772) of King County residents are 65 or older.<sup>23</sup> Some elderly residents may have a hard time driving in unfamiliar areas (where collection sites are located) and may also have difficulty loading and unloading their vehicles.

Some Programs, like the program in Clark County Washington, offer home pickup for the elderly and disabled if other alternatives do not exist.

**Other people without cars** also may have a challenging time bringing HHW to one of the Program's collection sites. LHWMP's collection services are provided with the assumption that residents will drive to collection locations to drop off their household hazardous wastes.

- Many people do not have cars and/or do not drive. The percentage of non-drivers is likely to increase with increasing urbanization and mass transit options, coupled with rising gas prices and campaigns to get people out of their cars.
- Other groups without cars include apartment dwellers, young people, renters and immigrant and historically underserved groups. There is some overlap among these groups.

Residents without cars currently have the following options for properly disposing of household hazardous waste. They can:

1. Find a family member, friend, or neighbor who can transport the HHW to a collection facility;
2. Hire someone to bring the HHW to the facility for them (and accompany them), such as a hauler or taxi cab.<sup>24</sup>
3. Transport the HHW to the facility by bicycle or on public transit (not advised);

Coordinating with a family member, friend or neighbor who drives appears to be the best option, but is not always possible or convenient.

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<sup>23</sup> 2007 King County Annual Growth Report, Statistical Profile of King County.

<sup>24</sup> The Program's HHW waste acceptance policy requires that the resident accompany the paid hauler. This is required 1) to so that the resident can help to identify the waste if there is a question about it and 2) to certify that what is being delivered is household hazardous waste.

## 10. Most individuals have intermittent need to use the HHW Collection Services

Whether they know it or not, King County's 1.8 million residents frequently purchase and use a wide variety of household hazardous products to clean and maintain their homes and gardens, to maintain automobiles, boats and other equipment, and for various hobbies and recreational activities; they also generate household hazardous waste (HHW). Even the most environmentally conscious household will have some HHW.

The volume and variety of household hazardous products available to consumers has mushroomed over the past several years.<sup>25</sup> Although household hazardous products are prevalent, residents tend to store household hazardous products for years and to dispose of accumulated quantities at times of transition; in most cases, any given resident's demand for hazardous waste disposal services is intermittent.

Household hazardous wastes are fundamentally different from municipal solid waste in terms of frequency of generation and the need for regular disposal. Most residents want to have weekly or bi-weekly garbage and food waste pickup. In contrast, residents typically store hazardous household products for many years, perhaps with the thought that they will use the product up. HHW usually is bought in for proper disposal at a time of transition, such as when the resident is moving.

Survey data provides additional insight into customer demand for HHW collection services.

- A 2004 survey found that Puget Sound homeowners "hold onto their left over paint a long time...most more than five years and many for more than a decade."<sup>26</sup>
- In LHWMP's 2007 Telephone Survey, 908 King County residents were asked whether they had leftover quantities of specific household hazardous products that they would no longer use. As is shown below, between 17% and 33% of the time respondents reported having specific unwanted leftover hazardous products in their homes. The majority of those interviewed (67-83%) said that they did not have any leftover amounts of specific household hazardous waste.<sup>27</sup> The range of responses is shown in Chart 1 on page 20.
- The 2007 Telephone Survey documented that accumulation of hazardous products differs with respondent's age and income and the type of housing the respondent lives in.
  - ☆ **Middle-aged and elderly respondents** report having greater proportions of leftover wood stain, solvents, spray paint and pesticides than did younger respondents (< 34 years old).<sup>28</sup>
  - ☆ **Generally, the higher a respondent's income,** the more likely they are to possess leftover quantities of all hazardous items.

<sup>25</sup> David Nightingale, Washington Department of Ecology, personal communication, April 14, 2008.

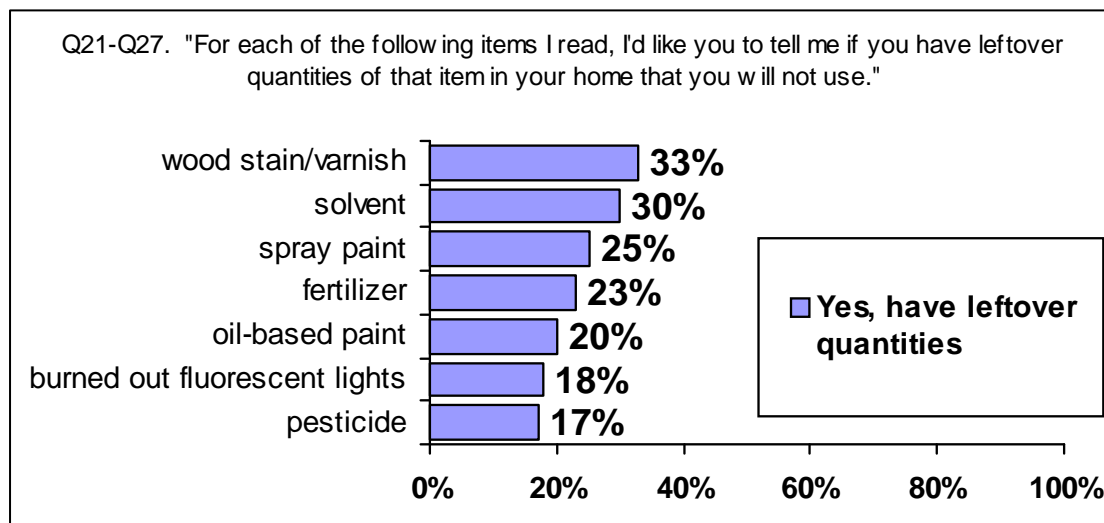
<sup>26</sup> David Nightingale, Washington Department of Ecology, personal communication, April 14, 2008.

<sup>27</sup> Residents were asked about oil based paint, spray paint, solvents, wood stain or varnish, pesticides, burned out fluorescent lights and leftover fertilizer. See Appendix C for survey questions and responses.

<sup>28</sup> See 2007 Telephone Survey Banner 3 for responses by age group.

- ☆ **Respondents living in a single-family dwelling** are more likely than multi-family respondents to possess leftover quantities of all items.<sup>29</sup> Single family homes are most likely to have leftover wood stain (40%) while multi-family residents are most likely to have leftover spray cans.<sup>30</sup>

**Chart 1: 2007 Telephone Survey Responses Regarding Leftover Products**



- The 2007 Telephone Survey also provided insight into how concerned respondents were about the environmental and health risks of specific hazardous products, and whether they knew how to properly dispose of leftover products. Survey respondents were asked what they would do if they wanted to get rid of (the specific products). The responses indicate that the majority of respondents recognize that most of the products should be brought to an HHW collection site. However, only about 30% of the respondents recognized that burned out fluorescent lights bulb should be brought to an HHW collection site or returned to a retail location; 40% of respondents would put the bulbs in the garbage or take them to a transfer station or “the dump.”<sup>31</sup>
- The 2007 On-Site Customer Survey of 1,852 household hazardous waste customers found that 75% of the people brought wastes in at a time of transition---during a major cleanup effort (37%) when they were moving in or moving out (27%), during a remodel or renovation project (9%) or a neighborhood clean up project. Approximately 20% of the respondents brought the wastes in as part of a “routine” visit. Customer responses are summarized in Table 10.

A higher percentage of visitors to the Wastemobile than to fixed facilities reported that they were making a routine visit (32% vs. 12%). One reason could be that in areas where the Wastemobile is the primary service for HHW collection, the population anticipates the

<sup>29</sup> EMC Research, *Local Hazardous Waste Management Program in King county Household Hazardous Waste Survey Summary of Findings, October – November 2007*, PowerPoint Presentation), Slide 4. Cited hereafter as *2007 Telephone Survey Power Point*. See Appendix C for additional details.

<sup>30</sup> See Appendix *2007 Telephone Survey*, Banner 2, page 8, and Appendix C for additional information on results.

<sup>31</sup> See *2007 Telephone Survey Power Point Presentation*, Slide 19 and Appendix C..

Wastemobile event and considers their visit part of an annual routine, unlike populations with access to year-round collection.<sup>32</sup>

<b>Table 10: HHW Collection Customer Survey Responses (2007)</b>		
<b>Reason for Visit</b>	<b>Number of Responses</b>	<b>Percent %</b>
Major clean-up effort (e.g., spring cleaning)	685	37%
Routine visit	365	20%
Previous resident left materials	268	14%
Moving out	247	13%
Remodel/renovation	163	9%
Other (please specify)	89	5%
Neighborhood clean-up effort	37	2%
	<b>1,854</b>	<b>100%</b>

#### **11. There is a need to continue to improve consistency in Program operations.**

In 2007, when this service level analysis started, there were significant operational differences among the LHWMP collection sites in terms of:

- The number of days and hours open per week
- The amount of waste accepted differed (Due to limited storage space Factoria had a lower threshold than the others)
- The North Seattle site required an appointment made through the Household Hazards Line and
- The Wastemobile was specifically promoted; the other facilities were not.

During 2007 and 2008 several changes were made to improve customer services and to increase consistency among the HHW collection facilities. The two Seattle HHW collection sites opened to the public an hour longer each day. In addition a decision was made to drop the appointment system for the North Seattle facility, making it easier for North Seattle residents to use the facility.

During 2008 there was inconsistency in the latex waste acceptance policies. Following the Program's decision to stop paying for latex paint collection effective 2008, King County stopped accepting latex paint at the Wastemobile and Factoria on January 1, 2008. However the Seattle facilities continued to accept latex paint from Seattle residents in 2008 (as directed by and paid for by Seattle City Council). The latex paint waste acceptance policy was aligned in February 2009, when the Seattle facilities also stopped accepting latex paint.

The Program should continue to look for ways to improve consistency in Program operations by:

<sup>32</sup> 2007 On-Site Survey, p. 4

- Analyzing operations to see whether improvements can be made in waste handling and processing that will increase the efficiency of operations.
- Maximizing consistency in operating hours and waste acceptance policies.
- Coordinating as much as possible in disposal contract requirements and negotiations to align waste management practices and to try to negotiate similar prices and conditions.

The Program should undertake a more coordinated public education campaign to promote the three fixed HHW collection sites as well as the Wastemobile.

**12. The Program should establish a capital budget line item and consciously plan for facility maintenance and upgrades.**

The Program should plan for needed maintenance and upgrades, and ensure that these are considered in annual budgets and in fee projections.

**13. The Program should work to improve the equity of its service delivery in so far as it is cost-effective and financially feasible.**

Work Group members concluded that HHW collection service should be increased in South King County and in Northeast King County. They also found that other increases in service were needed for multi-family, homebound and other underserved residents, and that enhanced promotion of services was needed.

The Work Group members identified the following ways to provide more equitable service delivery:

1. Expand HHW collection frequency in the relatively underserved areas (Northeast King County and South King County) in so far as is financially feasible.
2. Minimize redundant (duplicative) collection by redirecting Wastemobiles that operate within fixed facility service areas to underserved areas.
3. Adjust acceptance policies to allow multifamily building managers to bring wastes to the collection sites and:
4. Market the Program's HHW collection services to the general public. Specific targeted outreach is needed to homebound residents and others.

Work Group members identified and evaluated five options for improving the service delivery in south King County. These options are described on the following two pages. The options were mapped using the service area assumptions developed earlier in the Work Group's analysis. The final versions of the maps for each option can be found in Appendix E. The five options were presented to the MCC in September 2008.

**Option A. Add a fourth fixed HHW facility at Bow Lake transfer station, maintain North Seattle/South Seattle & Factoria sites as currently deployed Available in 2014**

Option A was recommended to take advantage of King County's plans to rebuild the solid waste transfer station at Bow Lake. It assumes that the three existing fixed sites would continue to operate.

- **North Seattle, South Seattle and Factoria facilities** continue to operate at current days and times.
- **A fourth fixed facility is added at Bow Lake** - open 6 days/wk, 8 hours per day
- **Wastemobile service is removed from the Bow Lake service area** (up to 48 days of service from 7 sites)

**Option B. Operate facilities in North Seattle, Factoria and Bow Lake (3 facilities redistributed) Available in 2014**

Option B was recommended to take advantage of King County's plans to rebuild the solid waste transfer station at Bow Lake and to minimize the overlap in fixed facility service areas. The proposed Bow Lake facility service area would overlap with the service areas for Factoria and, more significantly, with the South Seattle collection facility. This option takes advantage of Seattle's plans to rebuild the solid waste transfer station in South Seattle; the South Seattle facility could be eliminated, rather than replaced, effectively redistributing the three fixed collection sites.

- **A fixed facility is added at Bow Lake** – open 6 days/wk, 8 hours per day
- **The South Seattle facility** is eliminated (rather than replaced).
- **The North Seattle facility** increases to 6 days open/wk, 7 hrs per day
- **The Factoria facility** continues to be open 6 days/wk, 8 hours/day.
- **Wastemobile service is removed from the Bow Lake service area** (up to 48 days of service from 7 sites)

**Option C. Add semi-permanent collection service at Auburn SuperMall. Maintain North Seattle/South Seattle & Factoria as currently deployed Available in 2009**

Option C was recommended because it would provide regular collection service in an accessible area in the south part of South King County. The SuperMall operators were willing to host a regular Wastemobile at a time that no other city or county owned sites could be found. This option would have minimal overlap with the service areas of the three fixed facilities.

- **North Seattle, South Seattle and Factoria facilities** continue to operate at current days and times.
- **A semi-permanent collection service is added at the Auburn Supermall** - open 3 days/wk, 4 times per month, 7 hours per day
- **Wastemobile service is removed from semi-permanent area** (up to 33 days of service from 3 sites)

<b>Option D. Add Ideal Site in Auburn/Kent Area. Maintain North Seattle/South Seattle &amp; Factoria as currently deployed</b>	<b>Timing unknown.</b>
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Option D was developed with the idea of providing collection at a site that was the most equitable and accessible for south County residents. However efforts to identify city-owned or county-owned property had not borne fruit as of the time of the MCC briefing.

- **North Seattle, South Seattle and Factoria facilities** continue to operate at current days and times.
- **A fourth fixed facility is added in the Auburn/Ken area where it will add service to greatest number of south county residents** - open 6 days/wk, 8 hours per day
- **Wastemobile service is removed from the ideal facility service area** (up to 48 days of service from 7 sites)

<b>Option E. Expand Wastemobile Service. Maintain North Seattle, South Seattle &amp; Factoria as currently deployed</b>	<b>Available in 2009</b>
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Option E was developed to improve the frequency of HHW collection to the maximum extent possible as quickly as possible, while retaining flexibility to scale up/scale down as needed. King County staff concluded that Wastemobile service could be increased by 50 percent, with added service allocated proportionally in areas not served by fixed facilities.

- **North Seattle, South Seattle and Factoria facilities** continue to operate at current days and times.
- **Wastemobile service is increased from 31 to 45 events**, adding service in areas not served by fixed facilities--primarily south, southeast and northeast King County.
  - Increase North County service from 9 to 15 events (+ 6 events, 18 days of service);
  - Increase South County service from 21 to 30 events (+ 9 events, 27 days of service).

The South County options were compared in terms of their:

- **Equity** (measured in terms of service proximity, service frequency, increase in service to geographically undeserved areas/populations and how soon this option would be put into service);
- **Efficiency** (measured in terms of net increase of population serviced -to minimize the number of people served by multiple facilities-, percent of households served per year, and number of customers per hour open) and
- **Cost** was measured in terms of total cost of the option.

Work Group members did not agree on all of these measures. For example, there was disagreement about whether the number of customers served per hours open should be used as an efficiency measure. It was particularly difficult to get agreement about cost-assumptions around the many factors that went into cost calculations for the South End options including how much to project in terms of:

- Savings from no longer collecting latex paint;
- Projected disposal cost increases due to escalator clauses in current contracts as well as assumptions regarding the quantities and types of HHW that will be delivered to the Program;

- Projected cost increases when the disposal contracts are renegotiated (King County's takes effect in 2010; Seattle's in 2011).
- Projected savings from Wastemobiles that would no longer be needed under Options A through D.

The analysis was done using the best available cost estimates provided by the two solid waste agencies and the best available demographic and statistical information. In the end, the Program Administrator and Work Group members:

- **Confirmed that service should be increased in South King County.** They concluded that adding service will cost more than leaving things as they are, but it will significantly increase equity and efficiency.
- **Agreed that it doesn't make sense to build a fixed facility at Bow Lake now.** Non-construction options have better equity and efficiency. The Work Group members agreed to recommend the "don't build now" option since the non-construction options analyzed are more equitable and efficient and that construction at Bow Lake or another (ideal) site remain as available options in the future.
- **Agreed that the Auburn Supermall option** is much more equitable and efficient than the Enhanced Wastemobile Option, albeit at a slightly higher cost.

These recommendations were presented to the MCC in November 2008. See Appendix F for the options, criteria and recommendations provided to MCC in the fall of 2008.

#### **14. The Program should promote its homebound collection program.**

Work Group members found that the homebound collection services are not advertised and that people find out about the service almost by accident. Work Group members agreed that the availability of this service should be advertised both on-line and through selective marketing to senior centers and others, using the model of the Clark County Washington program and materials. Seattle Public Utilities has the capacity to respond to up to 150 homebound requests without adding additional staff. Work Group members discussed, but did not come to agreement about extending this service to senior citizens who can't bring the waste into one of our facilities.



## 4. Recommendations

This section summarizes the Work Group's recommendations. These recommendations were presented to the MCC in September and November 2008.

1. **Provide proximate service for as many King County residents as is economically feasible and sustainable** taking into consideration the ability to raise rates and to balance collection with other programmatic efforts to reduce and eliminate hazardous materials production and use.
2. **Factor product stewardship options into service level planning.** Residents will have an increasing number of nearby take back options for selected wastes as product stewardship systems evolve. This needs to be taken into account when deciding how to address current and projected service gaps.
3. **Increase the Program's overall service level from .41 service minutes available per household per year, to .5 service minutes per household per year, provided that it is financially feasible.** This is the level of service provided by Portland-Metro, our closest regional peer.

4. **Expand service level as needed to serve a higher number of households each year (target is 10 %, up from 7.8 % in 2007).**

This recommendation was made prior to understanding the full impact of discontinuing the collection of latex paint. The Program's decision not to accept latex paint has resulted in a sharp drop in the number of customers coming to Factoria and the Wastemobile in 2008 (down by approximately 40% as of mid-year).<sup>33</sup> Work Group members could not reach consensus on whether the target number of households served should be reduced, since marketing efforts could promote additional customers.

5. **Increase service frequency in Northeast King County** by expanding Wastemobile service and partnering with Snohomish County. Take steps to do this as soon as possible by reassigning Wastemobiles currently in fixed facility service areas.
6. **Increase service frequency in South King County** by establishing regular three-day per week Wastemobile collection at the Auburn SuperMall. Begin this as soon as possible in 2009 provided that it can be sustained over a two year period. Provide this as a two year pilot project and revisit this issue after we have two years of data from the operation of the SuperMall site. At that point consider:
  - Continuing the SuperMall operation;
  - Moving towards an Ideal Site (located to maximize access for South County residents);
  - Building a collection facility at Bow Lake (and probably closing the South Seattle facility).

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<sup>33</sup> As of the end of 2008, the Wastemobile had 35% fewer customers and collected 63% of fewer tons of HHW than in 2007. Likewise, Factoria had 43% fewer customers and collected 66% fewer tons of HHW than in 2007. The Seattle facilities are not experiencing the same sharp decline in customers since stopping the collection of latex paint on February 1, 2009.

This should be done because the residents of South King County clearly are underserved by the Program. South King County absorbed more than half of the County's population growth in the 1990s and continues to grow in population density and diversity. As of 2008 it had almost 600,000 residents. It has also experienced the most dramatic increase in diversity, with historically underserved populations doubling and tripling in several communities.<sup>34</sup> These trends are projected to continue.

7. **Do further research** into why historically underserved groups do not use program facilities and determine whether other steps should be taken.
8. **Increase public outreach** to maximize participation in fixed facilities service areas, including targeted outreach for **homebound residents, people living in multi-family residences, and historically underserved groups**. Increase multi-lingual outreach.
9. **Revise HHW acceptance policies** to encourage the use of Program collection services by people living in multi-family households.
10. **Reduce redundancy by removing the Wastemobile from fixed (or semi-permanent) collection service areas**. This was assumed in developing cost estimates for the South County options.

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<sup>34</sup> 2007 King County Annual Growth Report, pages 2 and 3.

## Work Group Members and Acknowledgements

We would like to acknowledge the hard work of the HHW Service Level Study Work Group, whose members put in long hours gathering and reviewing information and examining the HHW service level issues from all angles. Core members of the Work Group included:

- **Julie Mitchell**, King County Solid Waste Division
- **Jim Neely**, King County Solid Waste Division.
- **Julie Vorhes**, Seattle Public Utilities
- **Liz Tennant**, Office of the Program Administrator (facilitator)
- **Rob Van Orsow**, City of Federal Way
- **Min-Soon Yim**, Seattle Public Utilities

Thanks also to the following individuals who participated on the Work Group at various times:

- **Debbie Ansbaugh**, formerly of the City of Bothell (March –June, 2007)
- **Linda Jones**, Seattle Public Utilities (Summer 2007)
- **Alexandra Thompson**, formerly of King County Solid Waste (March – August 2007)

Finally, many thanks to the following individuals who provided critical assistance in designing and producing key work products for this effort:

- **Gerty Coville**, King County Solid Waste Division, for overseeing the HHW On-Site Collection Survey and the 2007 Telephone Survey;
- **Yuko Caras**, King County GIS, for her dedicated work to plot the results of the zip code analysis and generate the different maps that were needed as the options analysis proceeded;
- **Michael Davis**, Seattle Public Utilities, for assistance in brainstorming about underserved groups.
- **Trudy Rolla**, Public Health, Seattle & King County, for help in designing HHW Telephone surveys.
- **Megan Sety**, King County Solid Waste Division, for data on homebound and doing QA/QC work.
- **Paul Shallow**, Public Health, Seattle and King County, for his work pulling together key documents and double-checking findings.
- **Jay Watson**, Program Administrator, who steered us through the options analysis using the multi-criteria model.

We thank the **Washington Department of Ecology** for providing financial support for our household hazardous waste collection services through the [Coordinated Prevent Grant program](#).

## **6. Appendices:**

**Appendix A – Demographic Analysis and Projections**

**Appendix B – Benchmarking Results**

**Appendix C – Survey Results**

**Appendix D – Service Area Maps**

**Appendix E – Analysis of Fixed versus Mobile Collection Systems**

**Appendix F – Options, Criteria and Recommendations presented to the Management  
Coordination Committee**

**Appendix G – Homebound Promotional Material from Clark County, Washington**

The 2007 - 2008 Household Hazardous Waste Service Level Study Final Report is included in the 2010 Local Hazardous Waste Plan Update. However supporting appendices were not included due to space limitations.

To obtain the 2007 – 2008 Household Hazardous Waste Service Level Report with the appendices contact:

Office of the Program Administrator  
Local Hazardous Waste Management Program  
150 Nickerson Street, Suite 100  
Seattle, WA 98109  
206-284-7974

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# Appendix

## E

### 2007 Small Quantity Generator Disposal Study Work Group Report

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## **Appendix E: 2007 Small Quantity Generator Disposal Study Work Group Report and Follow-up Developments**

Appendix E contains the Local Hazardous Waste Management Program in King County's *Small Quantity Generator Disposal Work Group Report* as it was published in April 2007. The report describes the work groups findings and recommendations, including a recommended work plan for 2007-2008.

In May, 2007, shortly after this report was published, the Program's Small Quantity Generator (SQG) Disposal Project proposed to establish a pilot project with a focus on businesses that generate very small and infrequent quantities of hazardous waste. They proposed to:

- Accept SQG waste at the Wastemobile (March to October) and Factoria (year-round).
- The waste will be collected during existing collection hours.
- The maximum acceptable quantity per trip will be 30 gallons total at Factoria and 50 gallons at Wastemobile and 10 fluorescent lamps at either site and no container larger than 5 gallons. These are the amounts that households may bring in.
- The material types accepted or not accepted will be the same as those for collection from households.
- The Small Quantity Generator Pilot Program will be provided at no cost to the customer as long as they limit their wastes to the quantities permitted and provide the information requested, including a form acknowledging that they are SQGs.

Project staff proposed offering the service free of charge to allow the Program to collect needed data about the types of businesses needing/using the service and the types and quantities of waste they would bring. In addition to attracting enough SQG to collect useful data reasons included:

- No accounting and money collection systems to set up
- It will attract Very Small Quantity Generators and /underserved/financially strained and back of the truck small quantity generators.
- Since there is no charge businesses will be less likely to feel a need to misrepresent themselves as residents with HHW
- If no one comes a permanent service probably not needed;

This proposal was modified to:

- Include collection at the South Seattle collection site (to improve geographic equity); and

- Exclude collection of fluorescent lamps (to support the private sector take back system).<sup>1</sup>

The Program's Management Coordination Committee (MCC) approved the revised proposal on July 17, 2007. The SQG Pilot Project was launched in February 2008. It was extended and expanded in 2009 to include the North Seattle HHW facility and the Auburn SuperMall Wastemobile.

In January 2010 the Management Coordination Committee approved staff-proposed adjustments to the waste acceptance policy to better align it with the needs of targeted generators (those generating very small amounts of waste infrequently.)

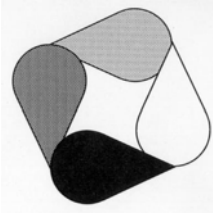
For additional information about the SQG Disposal Work Group Report contact:

Office of the Program Administrator  
Local Hazardous Waste Management Program in King County  
150 Nickerson Street, Suite 100  
Seattle, WA 98109  
206-284-7974

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<sup>1</sup> SQGs may recycle their lamps through Take It Back Network Members or through other fluorescent tube recyclers.





April 2007

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**Final Report**



**Small Quantity Generator  
Disposal Work Group  
Report**



**Liz Tennant, M. P. A.  
Alexandra Thompson, M. P. A.**

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

This report 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.

For more information about the Local Hazardous Waste Management Program visit [www.govlink.org/hazwaste/](http://www.govlink.org/hazwaste/)

To order additional copies of this report contact:

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150 Nickerson Street, Suite 100  
Seattle, WA 98109  
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**Publication number: SQG-GEN-10 (4/07)**

Tennant, Liz and Alexandra Thompson, *SQG Disposal Work Group Report*, Seattle, WA: Local Hazardous Waste Management Program in King County, April, 2007

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## Memorandum

**To:** Ken Armstrong, Program Administrator and  
Core 5: Lauren Cole, Dave Galvin, Ryan Kellogg, Linda Knight and Julie Vorhes

**From:** The Small Quantity Generator Disposal Study Work Group

**Date:** April 30, 2007

**Subject:** Small Quantity Generator Disposal Work Group Report

The Small Quantity Generator Disposal Study Work Group is pleased to present you with our final report. The attached report describes the work that we did during 2006 to examine whether the Local Hazardous Waste Management Program should collect hazardous waste from small quantity generators. It documents why and how we think services should be improved for conditionally exempt small quantity generators in King County.

### Key findings

- The programs that responded to a national survey generally reported that their SQG collection efforts are successful and are meeting a need in the community.
- Despite the Local Hazardous Waste Management Program's long history working with King County businesses, relatively little is known about the number and type of SQGs in King County and how they handle their wastes. Part of the problem lies in the nature of small businesses many of whom experience rapid turnover. In addition, small quantity generators run the gamut from one or two person operations that operate out of the back of a truck to much larger businesses that operate out of fixed facilities. There is a high turnover among very small businesses including those that operate out of the back of their trucks.
- Program data indicates that approximately 70% of the businesses visited between 2000 and 2006 either generated hazardous waste or had the potential to become small quantity generators. Many (44 percent) were disposing of hazardous waste improperly.
- Small quantity generators vary quite widely in the frequency and type of hazardous waste that they generate. Some SQGs, such as dry cleaners and automotive repair shops, generate hazardous waste on a regular basis. Other SQGs, such as painting contractors and small landscape owners, generate hazardous waste less frequently. In addition, many of the businesses that do not currently generate hazardous waste will do so at some point.
- In April and May of 2004 the Program surveyed 633 businesses that the Program had worked with during the past two years. Geographic targets were set and businesses were randomly sampled until the target was met. **The cost and convenience of disposal services were of great concern to the businesses sampled.** Seventy percent of the businesses (443/633) expressed concern about disposal costs. Almost 65% of the businesses (411/633) expressed concern about the convenience of disposal.

### Conclusions

- The SQG Disposal Workgroup finds that small quantity generators with infrequent, small quantities of waste do not have any easy way to get rid of their hazardous wastes. The

problem appears to be most difficult for businesses located outside of Seattle and particularly for small infrequent generators including businesses that operate out of the back of their truck.

- The SQG Disposal Workgroup also finds that fluorescent tubes are a waste stream of particular concern. This is a common waste stream and many businesses that do not otherwise routinely generate hazardous wastes are confronted with properly disposing of these wastes. Although several companies offer fluorescent lamp recycling, the Shoreline survey suggests that many businesses may be disposing of their fluorescent tubes in the garbage or bringing them into the household hazardous waste facilities (for free).
- Many businesses are paying \$108.84 annually into the Local Hazardous Waste Fund (\$9.07 per month.) It is incumbent upon the Program to make certain that they are receiving the types of services that assist them in being responsible corporate citizens.
- Businesses pay much more into the Local Hazardous Waste Fund than do residents (who pay \$.80 per month or \$9.60 per year), yet there is a wide difference in disposal convenience. The Program spends over \$4.1 million per year to collect residential waste for free at three fixed facilities and through the Wastemobile. In contrast the Program does not allow businesses to bring waste to its drop-off sites and reimburses less than \$150,000 dollars per year in voucher dollars.

The SQG Disposal Work Group members think that the time has come for our Program to improve SQG disposal options by:

- 1) Allowing businesses to drop of small amounts of waste at our household hazardous waste facilities (for a fee) and
- 2) Increasing disposal options for fluorescent tubes by working to expand the number of businesses that will take fluorescent tubes from businesses (thus reinforcing the product stewardship efforts of the Take-It Back network).

Many local government programs throughout the country collect business waste for a fee and feel that their programs are needed, manageable, and successful. Survey responses from Program staff and Shoreline businesses appear to confirm that businesses here would benefit from and would take advantage of these options if the Program offered them.

## **Recommendations**

### **1. The Program should work to expand disposal options for SQGs in King County**

The SQG Disposal Work Group recommends that the Program take the following steps to increase disposal options for SQGs:

- A. Pilot direct collection of SQG wastes.
- B. Promote product stewardship, especially for fluorescent tubes
- C. Continue to explore alternative approaches with private companies.

### **2. There is a need to better enforce existing regulations.**

### **3. The Program needs to improve other aspects of its services for SQGs.**

These findings, conclusions and recommendations are described more fully in the attached report. The report also has four appendices with survey results and other data that forms the basis for the work group's findings and recommendations.

We hope you find this analysis helpful as Program staff carry out the 2007 SQG Disposal work plan and approach Core 5 and the Management Coordination Committee with a recommendation to pilot SQG collection at one of the Program's collection facilities.

Sincerely,

Ray Carveth  
Water and Land Resources  
Division

Rika Cecil  
City of Shoreline/ Suburban Cities  
Association

Dave Hickok  
Public Health- Seattle & King  
County

Jim Talbot  
Seattle Public Utilities

Liz Tennant  
Office of the Program Administrator

Alexandra Thompson  
King County Solid Waste Division

# Local Hazardous Waste Management Program in King County



## Small Quantity Generator Disposal Work Group Report

In January 2006 Ken Armstrong, Administrator of the Local Hazardous Waste Management Program in King County (LHWMP), asked staff to form an interagency workgroup to address whether the Program can and should provide some type/level of direct collection service to conditionally exempt Small Quantity Generators (SQGs). The request was prompted by staff questions about why the Program does not collect business-generated moderate risk waste when business drop-off options are very limited and when so many other programs throughout the nation collect it. This question had been discussed numerous times during the Program's existence without any clear resolution. Also questions were being raised about whether the Program is providing an appropriate level of services to SQGs, some of whom are now paying approximately \$109 per year into the Local Hazardous Waste Fund.<sup>1</sup>

The SQG Disposal Work Group team was assembled to include at least one representative from each Program partner and a blend of people with expertise on household hazardous collection issues and small quantity generator issues.<sup>2</sup> The Program Administrator asked the workgroup to research this issue and report the results to the Core 5 management team and possibly to the Program's Management Coordination Committee (MCC). This is our report.

### Background

The Local Hazardous Waste Management Program in King County differs from many other local "household hazardous waste" programs in that it does not collect waste from conditionally exempt small quantity generators (SQGs). However, when it was first established the Program anticipated having two mobile collection facilities to serve King County businesses on a rotating basis and two auxiliary collection facilities located in areas of the county where few treatment, storage and disposal services (TSDs) are available. The original Local Hazardous Waste Management Plan, adopted in 1990, envisioned that the Program would contract with brokers or licensed TSDs to operate the collection facilities for the first years. Government support would then be phased out and private sector companies would run the facilities.<sup>3</sup> For a variety of reasons this plan was never followed. At the Program's outset a decision was made to rely on the private sector for SQG waste collection and to promote the use of private collection services through a combination of technical assistance, financial incentives and public recognition programs.<sup>4</sup> This course has been followed ever since.

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<sup>1</sup> Effective January 1, 2006 businesses with their own solid waste account are charged a hazardous waste fee of \$9.07 per month.

<sup>2</sup> SQG Disposal Workgroup members are listed on page 18 under "Acknowledgements."

<sup>3</sup> The Local Hazardous Waste Management Plan in King County, adopted November 1990.

<sup>4</sup> The Program's 2002 Component Review describes the original SQG collection/disposal goals and why the decision was made not to collect SQG Wastes. See Chapter 14, pages 278 ff.

## SQG Disposal Work Group Report

Over the past 16 years the Program has carried out several pilot projects to test the feasibility of alternative ways to collect SQG wastes. During this time Program staff have debated whether SQGs should be allowed to use existing household hazardous waste (HHW) facilities. At one point, in 1999, a workgroup met to address this issue. Each time, the discussions terminated without a plan. Part of the problem has been lack of staffing resources. Also there have been differences of opinion about whether SQGs need this service, whether LHWMP should get into the “business” of commercial waste, and whether SQG waste can legally be collected at HHW facilities. In addition there has been reluctance to appear to be in competition with private waste haulers.

### Steps and Activities Undertaken

The Small Quantity Generator Disposal Work Group members met regularly from January 2006 through November 2006. During this period work group members reviewed past Program activities, gathered information about other programs and assessed the need for direct collection of SQG wastes in King County. These activities and steps are described below. Results are reported in the **Findings** section.

1. **Work group members systematically reviewed the Program’s past activities** addressing collection and disposal of SQG wastes. Source documents included the 2002 Component Review, which describes and evaluates the Program’s SQG disposal related work from 1991 – 2000, and reports on subsequent projects including Rehab the (School) Lab, two “milk run” projects that were piloted, and a fluorescent lamp amnesty project. These projects are summarized in **Appendix A**.
2. **Work group members gathered information about how SQG wastes are handled in other jurisdictions.** Information was gathered through surveys, reports, and personal interviews. The intent was to discover what models were out there and how they work. The SQG Work Group:
  - **Surveyed members of the North American Hazardous Materials Management Association (NAHMMA)** for information about whether they collect business waste, whether and what they charge to collect it, any “lessons learned,” and who to contact for more information.
  - **Conducted an Internet survey** of major metropolitan areas to see whether and how they collect business waste.
  - **Gathered information about other MRW programs in Washington State** including Snohomish County, Pierce County and other parts of Washington.
  - **Interviewed** representatives of **companies** that provide hazardous waste collection services.

The survey spreadsheets and summary reports can be found in **Appendix B**.

3. **Work group members assessed the extent to which businesses appear to need SQG disposal services** by looking at demographic data, survey data, current disposal options, and evidence as to how SQG waste is being managed. Work group members:
  - Reviewed survey data and reports to determine how well collection programs are working elsewhere in Washington and in other states.
  - Evaluated disposal options and related services that currently are available to King County businesses.
  - Surveyed the Program’s field staff to obtain their perspectives on whether there is a need for SQG disposal.
  - Gathered additional data during a door-to-door survey of Shoreline businesses.

## SQG Disposal Work Group Report

- Reviewed anecdotal evidence from HHW collection facility staff and other Program staff regarding their observations and experiences.
- Reviewed demographic data.
- Tried to determine where is the waste going now using data from Seattle, King County and elsewhere including:
  - Illegal dumping contacts and reports
  - Waste sorts
  - Information from IRAC workgroups on Troublesome Sites and Illegal Dumping
  - Annual moderate risk waste reports from the Washington Department of Ecology
  - Data from Business Recycling Event collections held in the Suburban cities.
  - Program data regarding where businesses say their wastes go (Survey Team data)
  - Program data regarding generator status and waste disposal (mostly On-site and Survey Team data, with some data from the Response Team.)

Key data and summary reports can be found in **Appendix C**.

#### **4. Work Group members identified and evaluated options for improving SQG disposal services.**

- Identified options for improving SQG disposal services, ultimately generating about 30 options and more fully evaluating 20 of them.
- Identified which categories of small quantity generators appear to be most underserved.
- Developed and refined criteria for evaluating the various options.
- Evaluated the strengths, weaknesses and feasibility of the various options.
- Gathered more information on four different collection models--programs located in Portland (Oregon), Yakima County (Washington), Snohomish County (Washington) and Alameda County (California).
- Developed recommendations for Core 5.

Key data and summary reports can be found in **Appendix D**.

## Findings

### **1. The Program's various SQG disposal pilot projects generally have not worked well.**

From the outset the Local Hazardous Waste Management Program has relied on the private sector to provide disposal services for SQGs. Over the years Program staff have partnered with private companies in piloting various disposal projects with little success. The Program has experimented with offering mobile collection events (through the Wastemobile in 1994 and 1995), a six-week special offer to "Haul the Hazards" (1998), offering hazardous waste pickups via "milk runs" (2003 and 2004) and a fluorescent lamp amnesty program.<sup>5</sup> These projects generally did not attract large numbers of businesses and were costly to operate.<sup>6</sup>

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<sup>5</sup> These programs are described in Appendix A, with additional details provided in the 2002 Component Review, Chapter 14.

<sup>6</sup> See Appendix A for a summary and LHWMP, 2002 Component Review, Chapter 14, SQG Collection, pages 284 - 287 for details.



## SQG Disposal Work Group Report

### 2. Many local government programs throughout the nation collect SQG wastes.

Results from a February 2006 e-mail survey of members of the North American Hazardous Materials Management Association (NAHMMA) indicate that many programs, large and small, accept wastes from SQGs. Responses were received from 32 programs in thirteen states. Twenty-four of the respondents reported that they collect SQG wastes. The programs described range in size and approach.

- Most (20/24) of the programs allow SQGs to drop off wastes at their facilities or events. The remaining programs give businesses access to the HHW vendor (on or near the facility). One requires its vendor to allow SQGs to pay disposal fees that the HHW program has negotiated.
- Most of the programs require some type of payment. Nineteen of the programs charge directly for their services. The charges vary from program to program. Some charge for disposal costs only, others for labor, and others include administration costs. In three cases businesses pay the vendor directly. The Yakima (Washington) program takes SQG waste for free.<sup>7</sup>
- Most programs require paperwork prior to allowing businesses to drop off waste. Some require businesses to obtain a State/EPA identification number and/or require them to be certified as SQGs. Most programs require a waste inventory and require (or strongly encourage) an appointment before accepting waste.

The results were more mixed in a survey of Web sites of 15 metropolitan areas that mirror King County in geographical size and in population. Half (eight) of these areas collected SQG wastes; the others appeared not to. King County (currently the 13<sup>th</sup> largest metropolitan area) and its peers (Houston, Atlanta, Miami, Phoenix and Minneapolis, 10<sup>th</sup> largest to 15<sup>th</sup> largest) do not seem to accept waste from businesses. On the other hand, other urban areas such as San Francisco, Palm Beach County and Portland Metro do accept SQG waste at their facilities. As with the NAHMMA survey, the programs vary in the types of charges, the amount of paperwork required, and frequency of service.

In Washington State approximately half of the moderate risk waste programs collect SQG waste. In 2004, 22 of the 42 moderate risk waste programs provided collection services for SQGs. Most (18) accepted business waste at their fixed facilities; four accepted it at collection events.<sup>8</sup>

The programs that responded to the NAHMMA survey **generally reported that their SQG collection efforts are successful and are meeting a need in the community**. Many programs reported the need to promote their services. Several programs reported that SQGs continue to take advantage of (free) household service, even if SQG services are available. Survey responses, including comments about individual programs, can be found in Appendix B, pages 1-8.

The Washington's Moderate Risk Waste programs and Philip Services Corporation (which serves SQGs in King, Pierce and Clark counties) reported collecting 2.4 million pounds of SQG waste in 2004. A wide variety of wastes were collected. Highest volume wastes included non-contaminated oil, flammable liquids, oil-based paint, antifreeze, latex paint and "all other". Yakima County collected almost 49% of the statewide total (approximately 13,753 lbs. or 6.88 tons). This is largely due to

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<sup>7</sup> The Yakima program does not directly charge businesses for use of the Moderate Risk Waste facility. However the MRW program is funded through tipping fees, so businesses and residents pay for the Program every time they dispose of their garbage. (Dave Hickok, personal communication with Yakima MRW Coordinator Wendy Mifflin, 1/9/07).

<sup>8</sup> The Washington Department of Ecology's annual Moderate Risk Waste Reports document the activities of Washington's moderate risk waste programs. These reports can be accessed on line at <http://www.ecy.wa.gov/programs/swfa/mrw/>

## SQG Disposal Work Group Report

Yakima County's policy of aggressively promoting their program while not directly charging businesses to dispose or recycle their waste.<sup>9</sup>

### 3. Lack of data makes it difficult to determine what King County SQGs currently are doing with their wastes.

Despite the Local Hazardous Waste Management Program's long history working with King County businesses, relatively little is known about the number and type of SQGs in King County and how they handle their wastes. Part of the problem lies in the nature of small businesses many of whom experience rapid turnover. In addition, small quantity generators run the gamut from one or two person operations that operate out of the back of a truck to much larger businesses that operate out of fixed facilities. There is a high turnover among very small businesses including those that operate out of the back of their trucks.

#### A. Findings on generator status

According to King County's 2006 Annual Growth Report there are approximately **54,325** businesses in King County.<sup>10</sup> It is not completely clear how many of these businesses are small quantity generators.

- 1) According to the Washington Department of Ecology, 567 King County businesses currently are registered as small quantity generators.<sup>11</sup> However, given that most businesses generate some hazardous waste, this count is a gross understatement of the number of SQGs in King County. The Department of Ecology's tally is very incomplete because the agency does not require small quantity generators to obtain a state identification number.<sup>12</sup>
- 2) Analysis of the Program's field database found records with generator designation for 6,433 businesses that Program staff visited between January 1, 2000 and December 31, 2006.<sup>13</sup> During this period:
  - 2,725 of the businesses visited (42 %) generated hazardous waste. Most of these (2,609) were classified as small quantity generators.<sup>14</sup>

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<sup>9</sup> The Washington Department of Ecology, 2004 Moderate Risk Waste Report (Chapter VII). This data captures the CESQG waste volumes collected through moderate risk waste programs around the state and one vendor (Phillip Environmental Services). It does not give a complete picture of CESQG waste management in Washington because none of the other vendors report CESQG waste management to the Department of Ecology.

<sup>10</sup> This data reflects the number of firms as of 2004 with employees covered by unemployment insurance. It does not capture home-based businesses or firms without employees. It is interesting to note that manufacturing jobs comprise less than 10 percent of the total. For additional details see King County's 2006 Annual Growth Report, Chapter 5 (King County's cities), pages 73 and 74 for details. Available on line at: <http://www.metrokc.gov/budget/agr/agr06/index.htm>

<sup>11</sup> Data provided by the Washington Department of Ecology, January 12, 2007 indicates that there are 1,053 hazardous waste generators in King County. This includes 176 Large Quantity Generators (16.7%), 310 Medium Quantity Generators (29.4%), and 567 registered Small Quantity Generators (53.8%). An additional 410 King County businesses are registered as non-generators (XQGs). See Appendix C-2 for details.

<sup>12</sup> Some hazardous waste vendors require their clients to obtain an EPA/state identification number. Others don't.

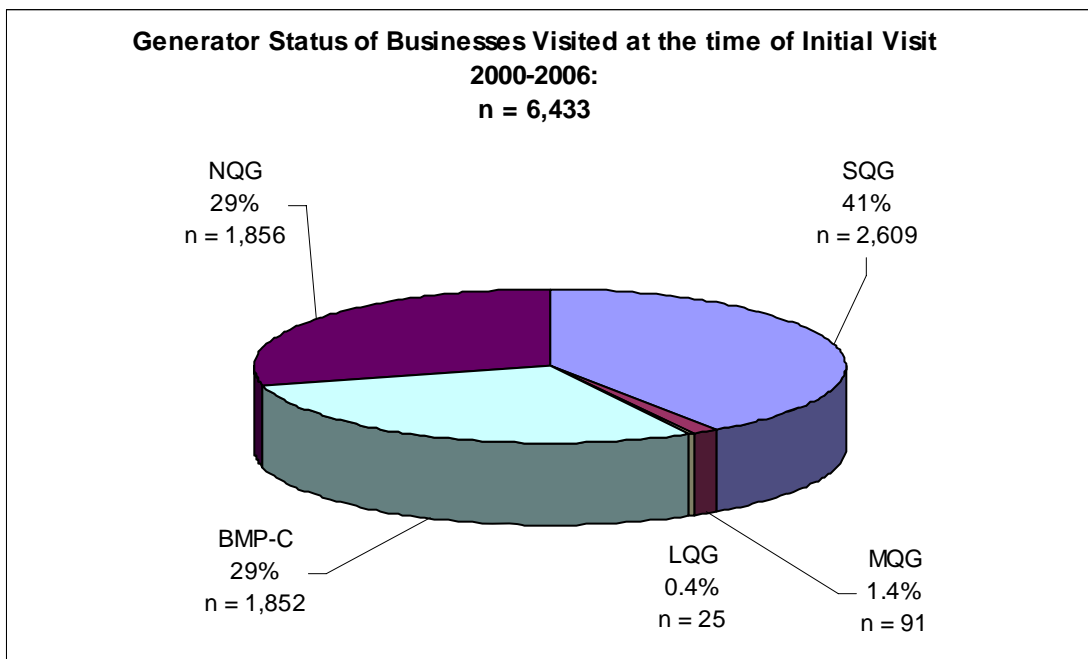
<sup>13</sup> See Hazardous Waste Management Program SQG Summary, Appendix C-3 for details. A total of 6,752 records were pulled. However in 318 cases generator status was unknown (?) and in one case the business had gone out of business. The query also provides this information by city. It gives generator status as of the time of the initial visit.

<sup>14</sup> Over the years the Washington Department of Ecology has asked Program staff to visit businesses that have officially notified Ecology that they are generators. Program staff have been asked to assess and assist these "new notifiers."

## SQG Disposal Work Group Report

- 1,852 of the businesses visited (29%) were storing or using hazardous materials but through proper handling or good fortune were not generating any regulated hazardous materials at the time they were visited. These “best management practices conformant (BMP-C)” businesses have the potential to become hazardous waste generators if they stop using best management practices.
- The remaining 1,856 businesses visited (29%) did not generate hazardous waste at the time they were visited by Program staff. However many of these businesses are likely to generate hazardous waste at some point. For example, proper management of fluorescent tubes is an issue for many businesses that do not otherwise use hazardous materials.

This data indicates that **approximately 70% businesses of the businesses visited** during this period **either generated hazardous waste or had the potential to become small quantity generators.**



It is important to note that this data is incomplete. For the most part it does not include information about visits that the Program’s Audit Team made to more than 6,400 businesses during this time period. Also, it is difficult to generalize from this data since three of the field teams (On-Site, Audit, and Response) tended to visit suspected hazardous waste generators.

The SQG Disposal Work Group notes that small quantity generators vary quite widely in the frequency and type of hazardous waste that they generate. Some SQGs, such as dry cleaners and automotive repair shops, generate hazardous wastes on a regular basis. Other businesses use small amounts of hazardous materials and generate hazardous waste less frequently. In addition, many of the businesses that do not currently generate hazardous waste will do so at some point.

### **B. Findings on SQG hazardous waste management**

The SQG Disposal Work Group concludes that businesses currently are dealing with their hazardous wastes in one or more of the following ways:

1. **Storing it** on site (in quantities that may or may not be legal).

## SQG Disposal Work Group Report

2. **Properly handling it** by sending it to a licensed treatment, storage, disposal or recycling facility (generally using a hazardous waste vendor).
3. **Bringing waste into one of the Program’s Household Hazardous Waste facilities** (representing it as household waste).
4. **Pouring liquid wastes down the drain.**
5. **Disposing of wastes in the garbage.**
6. **Dumping wastes illegally.**

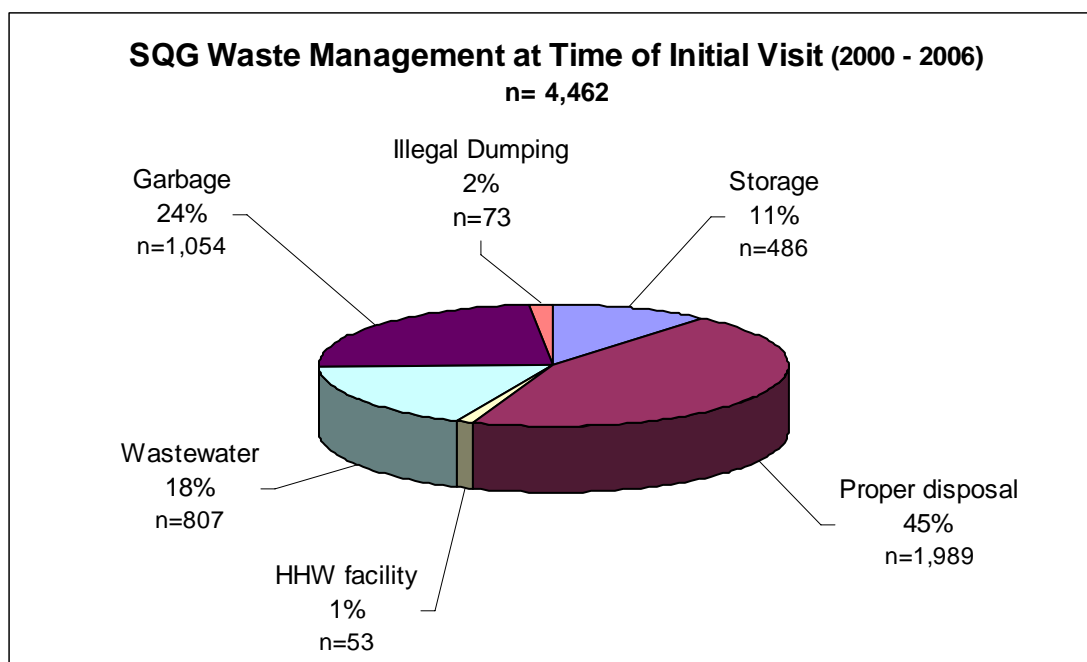
Unfortunately little data is available about how King County’s SQGs actually are managing their hazardous wastes.

- The Washington Department of Ecology does not require SQGs to register with them or to file annual reports, nor do they require this of the hazardous waste companies that collect SQG wastes. Ecology’s annual Moderate Risk Waste reports describe how much moderate risk waste was collected through municipal programs. These reports are of limited value in evaluating what King County’s SQGs are doing with their wastes since the Local Hazardous Waste Management Program in King County does not collect them. However Philip Environmental has started to report on how much SQG waste they collect in King, Pierce and Clark counties.
- SQG are not required to file reports at the county or local levels. However they are required to handle their waste in accordance with Washington’s Dangerous Waste regulations. The Local Hazardous Waste Management Program historically has provided technical assistance visits to King County businesses. The Program has waste management data for 4,462 of the 6,752 businesses described above (which were visited between 2000 and 2006).

<b>Waste Management Method</b>	<b>Number of Businesses</b>	<b>Percent of total (4,462)</b>
1. Storage	486	11%
2. Proper disposal	1,989	45%
3. HHW facility	53	1%
4. Wastewater	807	18%
5. Garbage	1,054	24%
6. Illegal Dumping	73	2%
<b>Total</b>	<b>4,462</b>	<b>100%</b>

This snapshot indicates that approximately 45% of the businesses were disposing of hazardous wastes properly, 44 % were disposing of it improperly (illegal dumping, down the drain, into the garbage) many (11%) were storing it, and a small number were bringing it into one of the household hazardous waste collection facilities.

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Because this is a snapshot it is hard to know how representative this is for businesses throughout King County. Other data sources are of limited help.

- The Washington Department of Ecology's Moderate Risk Waste Report does not provide clear data about the quantity of CESQG waste collected by Philip Environmental in King County. It does not provide any data about how much SQG waste is collected by other haulers and vendors.
- Data from the Program's Survey team indicates that between 2000 and 2005, 65 businesses reported to program staff that they disposed of hazardous waste at one of the Program's household hazardous waste facilities. According to staff calculations this amounted to 11,769 pounds per year, or 5.9 tons over the five-year period.<sup>15</sup> The Program's household hazardous waste collection coordinators estimate that as many as ten percent of their customers are bringing business waste.
- The survey of 25 Shoreline businesses found that 11 of the businesses (44%) were disposing of their hazardous wastes properly. Seven of the businesses (28%) were disposing of their hazardous wastes at a household hazardous waste facility. The remaining seven businesses (28%) were putting hazardous waste in the garbage. Fluorescent tubes comprised 70% of the mismanaged waste.<sup>16</sup>
- Data from solid waste composition studies indicates that hazardous waste comprises less than one percent of the solid waste stream. This has been the case historically. These studies shed some light on non-residential sources of household hazardous waste. However the large volume of solid waste masks the extent to which SQGs are disposing of hazardous waste in the garbage.<sup>17</sup>

<sup>15</sup> Data provided by Richard Thompson, March 6, 2006. See Appendix C, page c-6 for additional details.

<sup>16</sup> See Appendix C, page c-11 for details.

<sup>17</sup> Seattle Public Utilities and King County Solid Waste both conduct waste composition studies and waste sorts. Appendix C, page c-7, provides links to the two studies and summarizes their findings.

## SQG Disposal Work Group Report

- It appears that some suburban cities are collecting fluorescent tubes, refrigerants (CFCs), computers and electronics from businesses at their Business Recycling Events. In 2005 nine cities held businesses recycling events in which 750 businesses brought in over 50 tons of these wastes.<sup>18</sup>
- King County and other local sewer agencies set pretreatment standards for businesses that discharge toxic materials into the sewer system.<sup>19</sup> While these permitted point discharges are monitored; for the most part wastewater treatment plants do not monitor for the presence of toxic material other than mercury and several heavy metals. The only time that wastewater operators become aware of a problem is when there is a spike in pH or heavy metals, a major discharge that results in a fish kill, or a discharge that results in an explosion or other operational problems. In conversations with the Program Administrator in early 2005 wastewater treatment plant operators reported that they generally were not seeing operational problems with toxic materials. Their main concerns seemed to be around the management of fats, oils and grease.<sup>20</sup>
- Information about illegal dumping is somewhat scattered and is incomplete. The sources we looked at indicate that there is a significant illegal dumping problem in King County and that it is costly to address. Several IRAC workgroups were formed to address the related issues of troublesome sites, illegal dumping and improved enforcement. However much of the dumping involves solid waste, rather than hazardous waste.<sup>21</sup>

Although the total magnitude of the SQG disposal problem is unclear, available Program data indicates that the current disposal system is not working well. At the time Program staff first visited these businesses only half were storing or properly disposing of their hazardous wastes. To the contrary, over 40 percent were improperly disposing of hazardous wastes to the garbage or sewer systems. Although staff interactions can result in positive changes, businesses face a number of obstacles to properly managing their wastes. These include cost and lack of accessible drop-off options.

It is disturbing that so little data exists with respect to the fundamental management of SQG waste in King County. The Washington Department of Ecology and the Local Hazardous Waste Management Program should work together to remedy this.

#### **4. Disposal options available to SQG currently are very limited and the system is expensive and difficult to use.**

Work group members agree with the conclusions reached in the Program's 2002 Component Review. These were that "the 1990 Plan recognized that 'more accessible SQG collection services are needed' because 'to date, few economical disposal options have been open to SQGs' and that 'despite the Program's efforts, this remains largely true today.'"<sup>22</sup>

The Program helps businesses by reducing the cost of waste disposal and recycling, through the Voucher Incentive Program. The Program also provides information about hazardous waste haulers, disposal facilities and brokers. However in general these companies have been interested in larger quantity generators. At this point there is only one option for businesses that want to drop off their own wastes. Other options for SQGs are limited and very expensive.

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<sup>18</sup> Covington, Des Moines, Enumclaw, Kenmore, Kent, Kirkland, Maple Valley, Normandy Park and Sammamish each held business recycling events using solid waste coordinated prevention grant funding. See Appendix C-6 for details.

<sup>19</sup> See Appendix C, page c-10, for a brief summary of federal, state, and local discharge limits.

<sup>20</sup> In late 2005 and early 2006 the Program Administrator, Fund Manager, and Policy Analyst met with wastewater treatment plant managers to brief them on a proposed fee increase.

<sup>21</sup> See Appendix C, page c-9, for additional information about illegal dumping.

<sup>22</sup> 2002 Component Review, Chapter 14, SQG Disposal, page 278.

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As of December 2006 one company, Philip Services Corporation, offers drop off service three times a month for King County businesses. Two days each month businesses can drop off their wastes in the Georgetown area of Seattle. Once a month SQGs can drop off their wastes at Philip's facility in Kent. Businesses must pre-register with Philip, provide an inventory and arrange for payment. This option is not easily accessible for businesses outside of Seattle and/or Kent.

### A. Perspective of Program staff who regularly work with businesses

Most (6/8) of the Program staff who responded to our e-mail survey on this topic think that the current disposal system is not meeting the needs of King County businesses, particularly those that have a very small amount of waste per year.

- Small watch repair shops were given as one example. "It just seems ridiculous for them to pay Keep it Clean and pay such a high fee or spend half a day delivering these wastes to south Seattle (not to mention the risk of driving it across town especially if it is flammable)."
- Several respondents highlighted fluorescent tubes as a waste stream of concern. "There is especially a need for businesses not in the Seattle area to have a place to take fluorescent tubes. "

One respondent commented that "the services available in the private sector are few, pricey, and aren't generally set up to work with small and sporadic quantities, and some are of questionable reputation. I believe we should offer collection at our HHW facilities...with cost being paid by the business user."

The seven respondents emphasized that thresholds should be set to allow small quantities of waste and that businesses should pay. They all agreed that this needed to be carefully thought through.

The other two respondents were not necessarily opposed to collecting SQG wastes but had concerns about how this might undercut educational efforts and work to reduce pollution. Also one person raised concerns about:

- Potential regulatory impacts (would facilities become a TSD because of quantities?)
- Potential organizational impacts (i.e. this might eliminate the need for field staff (P2))
- Whether SQG wastes can be transported safely and whether insurance will allow it.<sup>23</sup>

### B. Perspective of Shoreline businesses

The perspective of 25 Shoreline businesses interviewed by the Survey Team appears to vary according to what they are doing with their waste. More than half of the businesses (14/25) were either putting their hazardous waste in the garbage (7) or taking it to a household hazardous waste facility (7). When asked why they didn't use a commercial hazardous waste vendor or drop-off site, three businesses said that they did not know how to handle the wastes and had small sporadic amounts. One business did not know that fluorescent lamps were hazardous waste. For the most part the mismanaged wastes were fluorescent tubes (in 10 out of the 14 cases). Convenience factored into use of the household hazardous waste facilities.

### C. Results of 2004 SQG Survey

In April and May of 2004 the Program **surveyed 633 businesses** that the Program had worked with during the past two years. Geographic targets were set and businesses were randomly sampled until the target was met. **The cost and convenience of disposal services were of great concern to the businesses sampled.**

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<sup>23</sup> Seven people responded to the survey in writing and one person met with Liz Tennant to discuss his perspective. Detailed responses can be found in Appendix C, pages c-12 to c-14.

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- **70 % of the businesses (443/633) expressed concern about disposal costs.** Thirty-seven percent (233) were very concerned, seventeen percent (105) were concerned, and seventeen percent were moderately concerned.
- **Almost 65% of the businesses (411/633) expressed concern about the convenience of disposal.** Thirty-one percent of the businesses (196) were very concerned about the convenience of disposal services, sixteen percent (103) were concerned, and eighteen percent (112) were moderately concerned.

Survey respondents were asked if they had other comments about issues. The majority of comments about other issues related to disposal information, disposal service and regulations/enforcement. The survey report noted that “the businesses wanted more information about disposal. They wanted more disposal services available and less costly disposal. They wanted coordination between enforcement agencies and equitable enforcement.”<sup>24</sup>

### D. Conclusions of the SQG Disposal Workgroup

The SQG Disposal Workgroup finds that small quantity generators with infrequent, small quantities of waste do not have any easy way to get rid of their hazardous wastes. The problem appears to be most difficult for businesses located outside of Seattle and particularly for small infrequent generators including businesses that operate out of the back of their truck.

The SQG Disposal Workgroup also finds that fluorescent tubes are a waste stream of particular concern. This is a common waste stream and many businesses that do not otherwise routinely generate hazardous wastes are confronted with properly disposing of these wastes. Although several companies offer fluorescent lamp recycling, the Shoreline survey suggests that many businesses may be disposing of their fluorescent tubes or bringing them into the household hazardous waste facilities (for free).

### 5. Because options are limited there is a need to increase disposal options for King County SQGs.

The members of the SQG Disposal Work Group find that there is a need to make proper disposal easier and less costly for businesses that periodically generate small quantities of hazardous wastes. Reasons for doing so include:

- The private sector has not developed or sustained a system that serves this group of generators well. Feedback from contacts at hazardous waste management companies indicates that these companies would be providing additional service if they thought it would be worth their while but that they don't see that it is cost-effective.<sup>25</sup> SQG Disposal Work Group members believe that in general, if the market were there, the private sector would step in. Since they have not, there is a role for LHWMP to step in and serve the SQGs that have limited, inconvenient, and/or costly options.
- The current limited drop-off options do not make it convenient for businesses with small amounts of hazardous waste to dispose of it legally. When the business has a small amount of waste, the cost of having a hauler pick it up discourages the business from disposing of it properly.
- The Program's vouchers helps to offset the high disposal costs of proper hazardous waste disposal. However even during the best years vouchers are issued to no more than 400 businesses and are redeemed by far fewer.

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<sup>24</sup> See Conditionally Exempt Small Quantity Generator Survey Draft Report by Trudy Rolla, September 2004, p. ii. For additional information and data about SQG disposal costs and convenience see pages 5, 6, 7, and 30.

<sup>25</sup> Liz Tennant, personal communication with Mike O'Donnell, Philip Services.



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- The current drop-off system is not geographically equitable. Businesses outside of Seattle and Kent do not have easy access to this option.
- Many businesses are paying \$108.84 annually into the Local Hazardous Waste Fund (\$9.07 per month.) It is incumbent upon the Program to make certain that they are receiving the types of services that assist them in being responsible corporate citizens.
- Businesses pay much more into the Local Hazardous Waste Fund than do residents (who pay \$.80 per month or \$9.60 per year), yet there is a wide difference in disposal options, opportunities and convenience. The Program spends over \$4.1 million per year to collect residential waste for free at three fixed facilities and through the Wastemobile. In contrast, the Program does not allow businesses to bring waste to its drop-off sites and reimburses less than \$150,000 dollars per year in voucher dollars.

The SQG Disposal Work Group members think that the time has come for our Program to improve SQG disposal options by:

- 1) Allowing businesses to drop off small amounts of waste at our household hazardous waste facilities (for a fee) and
- 2) Increasing disposal options for fluorescent tubes by working to expand the number of businesses that will take fluorescent tubes from businesses (thus reinforcing the product stewardship efforts of the Take-It Back network).

Many local government programs throughout the country collect business waste for a fee and feel that their programs are needed, manageable, and successful. Survey responses from Program staff and Shoreline businesses appear to confirm that businesses here would benefit from and would take advantage of these options if the Program offered them.

### **6. There also is a need to take other steps to improve how King County SQGs dispose of their hazardous wastes.**

Members of the SQG Disposal Work Group believe that in addition to making it more convenient to properly dispose of hazardous waste, it is important to design strategies that:

- Make it easier for businesses to understand what is required of them (e.g. on the Program's Web site);
- Spread the word through channels that businesses use;
- Continue to offer financial incentives (and perhaps explore easier ways to get vouchers), and
- Make it more difficult to dispose of hazardous waste improperly.

## **Recommendations**

### **1. The Program should work to expand disposal options for SQGs in King County**

The SQG Disposal Work Group recommends that the Program take the following steps to increase disposal options for SQGs:

#### **A. Pilot direct collection of SQG wastes.**

##### **1. There are many models of workable government-operated SQG collection programs.**

SQG collection programs in Yakima and Snohomish counties in Washington, Portland, Oregon, and Alameda County, California all appear to work well. It is worth studying these

## **SQG Disposal Work Group Report**

programs as well following up with key NAHMMA respondents on the lessons that they have learned. It will be particularly worthwhile to look at what they require in terms of paperwork, charging and billing. It is interesting to note that many of these programs serve about 500 businesses per year.

### **2. The LHWMP has the flexibility to take this on.**

The Washington Department of Ecology sets standards for the management of moderate risk waste. Both residential waste and waste from conditionally exempt small quantity generators is considered moderate risk waste. The state allows for co-mingling of moderate risk waste from residential and commercial sources. Many Washington State moderate risk waste programs can and do accept both residential and SQG waste and many of them co-mingle it.

The decision about whether to accept SQG wastes is a matter of policy. The Program can define the quantities and types of waste that it is willing to accept so as to limit the drop-off option to businesses with small amounts of waste. Pricing can reinforce this. If the Management Coordination Committee were to agree to accept SQG wastes this would need to be reflected in collection facility permits.

### **3. The Program should charge for SQG disposal.**

Fees can be structured and priced so as meet the needs of infrequent small quantity generators but not draw business away from haulers.

Careful consideration will have to be given to the best way to charge businesses and collect fees. The particulars will depend on which facility is chosen to pilot the project.

### **4. Issues that need to be addressed include:**

- The best location for the project
- Operational details
- Waste acceptance policies
- Permits, notifications, and other logistical issues that need to be addressed
- Fees
- Paperwork requirements
- Cost estimates and 2008 budget proposal
- Developing a marketing plan

Program staff that work on this issue should look for ways to offer this service in the least costly way possible. For example consideration should be given to accepting SQG wastes during normal HHW collection facility hours (like Yakima, Snohomish and Portland).

### **B. Promote product stewardship, especially for fluorescent tubes**

As was noted earlier in this report, fluorescent tubes constitute a ubiquitous waste stream in King County. Program staff and SQG Disposal Work Group members see this as a high priority issue. The waste disposal feedback from Shoreline businesses confirms that it is.

The SQG Disposal Work Group recommends expanding the range of drop-off sites for fluorescent tubes to increase convenience and regional equity and to craft a solution that continues to build on product stewardship models.

### **C. Continue to explore alternative approaches with private companies.**

Informal discussions with company representatives have indicated some level of interest in trying different approaches to providing services. For example one company representative has suggested that they may try to encourage large-scale customers to open their doors for residents and/or small businesses to drop off their wastes. It is appropriate to continue to explore ideas and consider

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partnering to advertise such events, but the Program should avoid underwriting additional private sector collection events.

Work Group members believe that this three-pronged approach should significantly improve disposal options for small quantity generators in King County.

### **2. There is a need to better enforce existing regulations.**

The SQG Disposal Work Group thinks that businesses improperly manage their waste in part because there are no real consequences for improper disposal. They do not face enforcement actions from government agencies or from the haulers who take away their garbage. The SQG Disposal Work Group recommends partnering with a variety of entities to encourage proper disposal. The group recommends:

#### **a. Working with:**

- Solid waste haulers
- Business associations, other business organizations and community organizations
- Business license centers and other points of contact and entry during the regular business process
- City and county governmental agencies (e.g. to enforce solid waste bans).

#### **b. Exploring solid waste screening strategies**

### **3. The Program needs to improve other aspects of its services for SQGs.**

The SQG Disposal Work Group thinks that businesses improperly manage their waste in part because they do not know which of their wastes are hazardous and are not clear about what they are required to do. This appears to be the case despite extensive outreach on the part of Program staff over the past sixteen years and despite the wealth of information available on the Program's web site. In spite of these efforts there is a need to provide information much more clearly to businesses...both in terms of making it easier to find specific answers on the Program's web site and for providing clear information in checklist format (such as Ecology once provided.)

## **2006 Strategic Planning Process**

In January 2006, LWHMP began an extensive strategic planning process. The Program's Management Coordination Committee revised the Program's goals. The Core 5 management team defined priority outcomes for each goal. In August 2006 Program staff were assigned to one of eight workgroups to discuss various aspects of LHWMP service. One of the workgroups –Workgroup 7—examined recommendations with respect to Business Waste Management programs.

Dave Hickok (Public Health) and Alexandra Thompson (King County Solid Waste Division) served as the SQG Disposal Work Group's liaisons with Workgroup 7. The SQG Disposal Workgroup developed recommendations which were by accepted by Workgroup 7 members and incorporated into their recommendations.

In early November, Core 5 reviewed the outcomes proposed by the eight workgroups. The recommendations from the SQG Disposal Group were rewritten slightly for content and format. The final Core 5 approved outcomes, listed below, are incorporated in the SQG Disposal Work Group's recommended 2007-2008 work plan.

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**Outcome 1: By the end of 2007, increase SQG waste disposal service levels.**

**Interim activity.** When approved by Core-5/MCC, implement SQG Disposal workgroup recommendations to increase regional and business equity.

**Outcome 2: By the end of 2008, triple the number of businesses that accept and recycle fluorescent tubes and bulbs.**

**Outcome 3: By the end of 2007, a regional regulatory enforcement policy is developed.**

**Interim activities.** Identify key regulatory agencies and other stakeholders. Other key stakeholders might include haulers, business associations, and community organizations

**Outcome 4: Beginning in 2007, businesses have convenient access to hazardous material/waste information** (e.g. waste reduction, compliance assistance, materials management, waste disposal, etc.).

- Business waste line.
- Program Web site.

The SQG Disposal Work Group based its Recommended 2007-2008 Workplan on these approved outcomes.

### Recommended 2007 – 2008 SQG Disposal Work Plan

**1. By the end of 2007, increase the number of SQG drop-off locations and increase the number of days they are open.** (Presently, one location is open two days per month and the other is only open one day per month.)

**Rationale:** This will:

- Make proper disposal easier and closer for customers to get to (Improve regional equity)
- Allow all eligible SQG generators be able to use the site(s) (Improve customer equity)
- Reduce roadblocks by reducing paperwork and number of steps required to dispose of small quantities of hazardous waste properly.

**Recommended activities:**

**A. In 2008 offer a pilot SQG collection program at an existing HHW facility for 6 to 12 months.**

**By March 31, 2007**

- Decide on the best location for the pilot project. Regional equity would suggest the location be other than in south Seattle or Kent.
- Decide whether SQG collection can occur during HHW hours of operation or if SQG collection should occur during separate hours of operation. (This will have budget and service implications.)
- Identify logistical issues that need to be addressed (e.g. permits that need to be revised, agency notifications, permit revisions, development of standard operating procedures.)

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- Develop a proposal for the types and levels of fees to charge SQGs and how the fees would be assessed and collected. Consider whether to establish any wastes or minimal quantities for free. (Consider how other programs approach this.)
- Propose budget and staff resources for Core 5 to consider during 2008 budget process.
- Set schedule for remaining 2007 tasks which are to:
  - Determine the minimum amount of information (paperwork) that would be required to satisfy regulatory requirements while still providing enough data to assess the success of the pilot. This would improve customer convenience.
  - Look into tracking data via generic profiles (i.e. – calculate the average weights of typical wastes brought in.) This would reduce the amount of paperwork needed.
  - Consider limiting the quantity and/or type of products accepted (possibly free up to a point and then competitive pricing after that). This would simplify data collection with fewer types of products to track.
  - Address the logistical issues identified above (3)
  - Develop a plan to market the pilot project.

### **B. Continue to explore private and public options for collection**

- During 2007 evaluate the Clean Harbors model where they provide collection of HHW from employees of a business complex and might open up the location to accept waste from surrounding SQGs. Determine whether they---or other vendors---plan to offer service like this in King County.
- For future consideration, what developments are there in FedEx and UPS shipping that might allow shipping of MRW. (Monitor developments at FedEx, UPS and other shippers for policy changes that may allow shipping of moderate risk waste in the future.)

### **2. Triple the number of businesses (retailers) that accept and recycle fluorescent tubes and bulbs by 2009.**

- Coordinate with fluorescent lamp project to achieve this result

### **3. By the end of 2007, a regional regulatory enforcement policy is developed.**

#### **Identify key regulatory agencies and other stakeholders.**

Other key stakeholders include:

- Solid waste haulers
- Business associations
- Community organizations

#### **Partner with a variety of entities to encourage proper disposal of MRW by SQGs with the use of non-government consequences.**

#### **Work with solid waste haulers (e.g. Allied Waste, Waste Management, American Disposal)**

- Contact haulers and begin discussing the issue.
- Use trainings at their safety meetings to bring haulers on board that this is an issue. Consider tying the issue of the preventing exposure to the dangers of MRW as a way to complement efforts in union contracts to increase safety.

## SQG Disposal Work Group Report

- Ask haulers to refuse to pick up dumpsters with MRW in it. Businesses could be added to the “exception list” and be forwarded to LHWMP for technical assistance follow up.
  - Contact and work with business associations, other business organizations and community organizations.**
    - Identify consequences that are meaningful to their members.
    - Level the playing field and eliminate competitors with poor intentions
    - Share information with members
  - Explore solid waste screening strategies**
    - Look into implementing a program where loads are checked at transfer stations. Some entities (Pierce County) routinely check dumpsters and checking loads at the transfer station. They will turn away loads with MRW and report drastic reduction in MRW brought in. This puts pressure on the hauler to put pressure on the generator to do proper disposal.
    - Look at different staffing configurations for this work. One would be to use screeners at the tipping floor. Another is to take transfer station operators (TSOs) out for a tour of businesses. Train the TSOs to know what to look for and give them permission to reject loads.
  - Connect with businesses somewhere along the business process (license renewal, etc.)**
  - Look for points of contact and entry during the regular business process** such as license issuance, license renewal and other points. Partner with licensing agencies. Make this a priority. Consider at least providing a hazardous waste checklist when businesses start up.
  - Work with city and county governmental agencies.**
  - Work with city to identify bad players, specific areas and/or industry types of concern to city officials.
  - LHWMP policy needs to come out clearly about its support for business consequences.
  - Work with city solid waste contacts to include language in their hauler contracts** about what the consequences the hauler can provide that will aid the proper disposal of MRW. Coordinators could be briefed on a regular basis through the meetings.
4. **Beginning in 2007 do more to help business understand what is expected of them.** Make it easier for them to know what they are legally obligated to do.
- Revise and improve web site.** Ideas include screens where you can retrieve information by the business type, waste type, or waste category, and can find out what liabilities the business has. Provide clear information about waste reduction, compliance assistance, materials management and waste disposal.
  - Recreate the one-page checklists for SQGs, MQGs, and LQGs, on what their liabilities and responsibilities are.** (Washington Department of Ecology once had very helpful checklists for each generator category.)
  - Create the one-page checklists for businesses by industry type.**
  - Make sure that the Business Waste Line staff have access to and give businesses clear helpful information regarding waste reduction, compliance assistance, materials management and waste disposal.**

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## **Acknowledgements**

We would like to acknowledge the hard work of the SQG Disposal Work Group, whose members put in long hours gathering and reviewing information and examining the SQG disposal issues from all angles. Core members of the SQG Disposal Work Group included:

- Ray Carveth, King County Water and Land Resources Division.
- Rika Cecil, City of Shoreline/ Suburban Cities Association.
- Dave Hickok, Public Health – Seattle & King County
- Jim Talbot, Seattle Public Utilities
- Liz Tennant, Office of the Program Administrator (facilitator)
- Alexandra Thompson, King County Solid Waste Division

Lisa Westgard and Julie Vorhes, both of Seattle Public Utilities, also provided input.

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## **Appendices**

### **Appendix A - Summary of past activities of the Local Hazardous Waste Management Program in King County (1991 – 2005)**

### **Appendix B- Information about SQG Collection Programs in the United States**

- Appendix B-1 – Results of the SQG Survey of NAHMMA Members (pages b-1 to b-8).
- Appendix B-2 – Results of the Internet Survey of Similar Metropolitan areas (pages b-9 to b-12).
- Appendix B-3 – Information about SQG Collection Programs in Washington State (pages b-13 to b-14).
- Appendix B-4 – A Focus on Four Programs that Collect SQG Waste (pages b-15 – b19).

### **Appendix C – Information about King County Businesses, Generators, and Waste Disposal**

- Appendix C – Description of contents (page c-1).
- Appendix C-1 – General Information about King County businesses and what they pay into the Local Hazardous Waste Fund (pages c-2 – c-3).
- Appendix C-2 – Generator data from the Washington Department of Ecology (p. c-4).
- Appendix C-3 – Generator data from the Local Hazardous Waste Management Program (p. c-5).
- Appendix C-4 – Waste Management data from the Local Hazardous Waste Management Program (p. c-6).
- Appendix C-5 – Summary data from Waste Composition Studies (p. c-7).
- Appendix C-6 – Summary data from suburban city business recycling events (p. c-8).
- Appendix C-7- Illegal dumping data summary (p. c-9).
- Appendix C-8 – Additional information about wastewater/sewer treatment (p. c-10).
- Appendix C-9 – Shoreline Business Survey Results (p. c-11).
- Appendix C-10 - Staff survey results (pages c-12 to c-14).

### **Appendix D – Process for Developing, Ranking and Rating Disposal Options**



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## Appendix A

### Summary of past activities of the Local Hazardous Waste Management Program in King County (1991 – 2005)

#### Overview

The 1990 Plan envisioned having two mobile collection facilities to serve King County Businesses on a rotating basis and two auxiliary collection facilities located in areas of the county where fewer TSD services are available. It was envisioned that the facilities would be operated under contract by brokers or licensed TSD services. The government subsidy was intended to run for five years after which SQG would become entirely responsible for the costs of hazardous waste management. (The assumption was once a business was brought into the education and compliance network they would continue to manage their wastes responsibly.)

1. Specific goals were set for when the facilities would come on line (1991-1993) and how much waste they would collect. For a variety of reasons no Program-sponsored facilities (mobile or fixed) have ever been established to collect SQG wastes. Instead the Program has opted to rely on a combination of technical assistance, financial incentives, and public recognition to promote proper disposal by businesses and other conditionally exempt small quantity generators (CESQGs).<sup>1</sup>
2. The Program also has experimented with special waste collection projects. The results of these pilot projects are summarized below. In general terms they have not drawn large numbers of businesses and they have been costly.
  - Collection of CESQG wastes at the Wastemobile (1994, 1995)
  - Outreach through property managers (Haul the Hazards Project, 1998)
  - Milk run pilot projects
  - Targeting waste from schools in King County
  - Targeting fluorescent lamps
3. There are between 54,000 and 83,000 businesses in King County depending on which statistic is used. It is estimated that there are between 45,000 and 50,000 small and medium quantity generators in King County. However these estimates are not firm.
4. There is very little good information about how much SQG waste is generated or where it is going. The most tangible data we have is from the Voucher Incentive Program which reimburses SQGs for proper waste disposal. Between 1996 and December 2000 the Voucher Incentive Program helped SQGs pay for recycling and/or proper disposal of approximately 369 tons of hazardous waste. (Database problem have prevented this figure from being updated.)
5. The field teams do not consistently or uniformly provide data on quantities of waste reduced, recycled, or disposed of properly.
6. The 1990 Plan recognized that “more accessible SQG collection services are needed” because “to date, few economical disposal options have been open to SQGs.”<sup>2</sup> Despite the Program’s efforts, this remains largely true today.

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<sup>1</sup> The Program’s 2002 Component Review describes how and why the decision was made not to collect SQG wastes. See Chapter 13, SQG Disposal, pages 280 ff. Chapter 14 provides a more thorough description of most of the points noted here.

<sup>2</sup> LHWMP, Plan Update, page 3-26.

## SQG Disposal Work Group Report – Appendix A

### Wastemobile pilot projects (1994 -1995)

1. The Local Hazardous Waste Management Program and Philip Environmental Inc. cooperated to conduct and evaluate four pilot collection events for SQGs in May, June, and October 1995. These projects are described in detail in the 2002 Component Review.<sup>3</sup>
2. The Wastemobile collection events were held in Tukwila, Auburn, Woodinville and Bellevue. Only 20 businesses were served through the first three events. Turnout was lower than expected.
3. Prior to each event area businesses received promotional mailings. Publicity for the first three events included advertisements placed in the local and daily newspapers for the affected areas and in-person promotion by field staff during 55 field visits. The Bellevue event was extensively promoted through a combination of targeted mailings, advertisements and in-person contacts.
4. The results of these efforts are summarized in the table below:

	<b>Tukwila</b> 3/17	<b>Auburn</b> 6/14	<b>Woodinville</b> 6/20	<b>Bellevue</b> 10/16	<b>Totals</b>
Number of businesses receiving promotional brochures	489	2,339	1,027	2,460	6,315
Number of participants	2	11	7	9	29
Waste collected (pounds)	339	1,484	810	1,095	3,728
Marketing costs (to the Program)	\$413.07	\$1,739.83	\$2,167.12	?	> \$4,320.02
Approximate operating cost (borne by Philip Environmental)	\$1,200	\$1,200	\$1,200	\$1,200	\$4,800
<b>Subtotal of costs</b>	<b>\$1,613.07</b>	<b>\$2,939.83</b>	<b>\$3,367.12</b>	<b>&gt; \$1,200</b>	<b>&gt;\$9,120.02</b>

5. According to Philip Environmental at that time, 15 – 17 businesses would need to attend each collection event to make SQG collection at the Wastemobile economically viable without a subsidy.

### Haul the Hazards Campaign (1998)

1. The “Haul the Hazards” Campaign was a six-week campaign providing a time-limited offer to businesses where they could receive up to \$1,000 of hazardous waste collection or disposal services. The purpose of the project was to test new method of outreach through third parties<sup>4</sup> and to provide an incentive for SQGs to properly recycle or dispose of their hazardous waste.
2. The basic concept of the campaign was to distribute information about the Local Hazardous Waste Management Program through third parties who might be perceived as less intimidating than government staff. Plans called for distribution of Program brochures and messages through representatives from insurance, banking, fire inspection and property management organizations.

<sup>3</sup> LHWMP, 2002 Component Review, Chapter 14, SQG Collection, pages 284 -287.

<sup>4</sup> The consultant team developed a brochure and recruited fire chiefs, loan officers, insurance agents, and property managers to distribute the brochure. They also sent brochures to each of the 75 fire chiefs in King County, to Overall Laundry and Aramark Uniform.

## SQG Disposal Work Group Report – Appendix A

3. The six-week campaign involved the distribution of brochures promoting up to \$1000 worth of free hazardous waste disposal to qualifying businesses. The cost of the disposal was split between the county and the two waste disposal/hauling companies that participated. The Program's share was funded by King County Solid Waste Division and disbursed through the Voucher Incentive Program.
4. Fewer hazardous waste companies participated in the project than was originally hoped. During initial discussions early in the spring of 1998, four haulers agreed to participate in the program. In the end, only two actually participated, the other two declined due to financial concerns.
5. The Haul the Hazards campaign was launched April 27, 1998, and ran through June 5, 1998. The original intent was that SQGs that called the Business Waste Line during this period to learn more about the Haul the Hazards Program were offered up to \$1,000 of free services if they would:
  - Agree to a visit by Program field staff.
  - Adopt the field specialist's recommendations.
6. If they agreed to these conditions, businesses qualifying as small quantity generators would be entitled to receive up to \$1,000 worth of hazardous waste collection and disposal service. (They would be reimbursed for \$500 of out-of-pocket costs through the Voucher Incentive Program, and the waste haulers would absorb \$500 in costs.)
7. During the six-week pilot, the Business Waste Line set up 122 site visits to Haul the Hazard participants, exceeding the goal of 100 businesses. However, fewer than 50% of the calls came in through third party partnership referrals and most of those were property managers who wanted to use the offer themselves.
8. Only five businesses that called had received a flyer from a targeted third party:
  - Eighty three of the vouchers issued to SQGs during the Haul the Hazards Project were submitted for reimbursement. In all 81 SQGs were reimbursed approximately \$29,100 with an average reimbursement rate of \$345 per voucher. The amount of waste collected was not reported.
9. Costs of staff time, consultants, and vendors were significant but not quantified.
10. The consultant made the following recommendations for improving the effectiveness of any future campaigns:
  - If there is another program where vouchers are used, a limited number of vouchers should be printed for tracking results (during this campaign "Haul the Hazards" was handwritten on regular vouchers.)
  - Special serial numbers or a different heading should be printed on the vouchers to distinguish them from the regular voucher. A running total should be kept during the program to monitor how many vouchers are being distributed, especially if a limited budget has been designated for the project.
  - Criteria for reimbursement should be clearly defined at the beginning of the project to avoid confusion and/or misuse of the program.<sup>5</sup>

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<sup>5</sup> See the 2002 Component Review, Chapter 14, pages 289-293 for details.

## SQG Disposal Work Group Report – Appendix A

### Rehab the Lab (1999 – 2002)

1. Rehab the Lab was another special collection program. Its main focus was working with middle and high schools to increase student safety by removing unstable, high risk, and unneeded laboratory chemicals from the schools. The project was prompted by Program staffs' experience in visiting local schools (upon request): they repeatedly found dangerous chemical stockpiles with no budget to pay high disposal costs.
2. Rehab the Lab program started in 1999, but significantly expanded when the Management Coordination Committee approved the expenditure of \$300,000 per year for 2000 and 2001.
3. The project's objectives include:
  - Protecting students, teachers and the environment.
  - Working with the whole school, not just the science labs.
  - Eliminating old chemical stockpiles.
  - Reducing hazardous waste generation.
  - Improving chemical storage practices.
  - Initiating long-term incorporation of pollution prevention strategies.
4. The project was carried out by a multi-agency team consisting of staff from the On-Site Consultation Team (lead science lab visits), the Audit Team (lead vocational, arts and administrative program visits), the SQG Collection Component Coordinator (provided funding), the Voucher Incentive Program (processing vouchers) and staff from the schools programs (planning and outreach).
5. The Rehab the Lab project team developed a wide variety of educational materials for teachers and school administrators including alternative experiments. They also designed a special web page with information on how to apply for a visit, fully scripted lesson plans for least toxic chemistry labs, information on ways to reduce chemical stockpiles, and a list of chemicals whose risks outweigh their educational utility.
6. Schools wanting to receive the chemical disposal services had to receive a site visit and had to make a commitment to meet certain criteria. These were spelled out in a pledge chart that had to be signed by a representative from the administrative or district level, the principal, and a science teacher. Participating schools were *required* to:
  - Commit to proper disposal of hazardous waste.
  - Allow a complete technical assistance site audit of the whole school.
  - Keep incompatible chemicals segregated during storage, and return bottles after use.
7. Participating schools were also *required to adopt at least two* "strongly recommended" practices, although they are encouraged to adopt them all. Strongly recommended practices included:
  - Purchase no high-risk chemicals (on list provided to the schools).
  - Adopt at least one small-scale lab.
  - Link purchase to use – purchase containers so contents will be used up within five years.
  - Accept no donated chemicals unless you can demonstrate that they will be used up in one year.
  - Complete earthquake preparedness – put lips on shelves, anchor shelves, provide secondary containment.
  - Put spill response supplies and procedures in place for major classes of hazards.

## SQG Disposal Work Group Report – Appendix A

8. Schools were then provided with a vendor list and arrange for the wastes to be shipped with the vendor requesting reimbursement at a flat rate.<sup>6</sup> After the wastes were shipped, Program staff made return visits to evaluate the school and further educate school staff.
9. Program staff taught school science teachers how to:
  - Properly store chemicals.
  - Avoid acid storage problems.
  - Improve earthquake-preparedness.
  - Reduce the use of toxic/hazardous chemicals (particularly high-risk materials.)
  - Institute better inventory management.
  - Meet their curriculum needs and reduce health and safety risks by using least toxic chemistry lab lesson plans.
10. Similar information was provided during the full-school audit. School personnel also were given information about hazardous waste designation, basic regulatory requirements, choosing a vendor, documentation, and where to go for help and information.
11. In addition to providing information through technical assistance visits, the Program offered 20 workshops to more than 350 teachers and other interested parties.
12. It was evident that this service was greatly needed. Field staff saw significant problems in the way school laboratory chemicals are stored (incompatible wastes, explosive wastes, excess storage, excessively long accumulation times, no spill or leak control, degraded containers), labeled, disposed of, and used. They also repeatedly found high risk chemicals, including potential explosives.
13. As of the end of 2002 the Rehab the Lab project:
  - Made 577 visits to 324 schools (72 high schools, 76 middle schools, 133 elementary schools and 43 “other” schools.).
  - Resulted in the removal and proper disposal of 84 percent (7,607 lbs) of high risk chemicals found, including 664/ 761 lbs of mercury (87 percent).
  - Resulted in the removal and proper disposal of 38 tons of hazardous chemicals (1,410 drums);
  - Treated potential explosives at 44 schools.
  - Gave 20 workshops to more than 350 teachers.
14. The Rehab the Lab project cost approximately \$520,000 in waste removal costs (paid through special Rehab the Lab vouchers). This does not include staff time, which totaled approximately 1.7 FTE over the three year period.<sup>7</sup>
15. The Rehab the Lab project was well received by schools in King County and has inspired other states to target school labs. It was one of nine winners of the 2001 Washington State Governor’s Award for Pollution Prevention and Stewardship.

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<sup>6</sup> A great deal of time initially went into establishing acceptable contracts with private haulers. The final arrangement involves nine haulers whose placement on the list is rotated so that the companies have an equal opportunity to be at the top of the list. According to Dave Waddell, Rehab the Lab manager, the haulers were randomly sorted in terms of placement on the initial list. They have been rotated since that time. (Personal communication 7/3/02.)

<sup>7</sup> The FTE estimate was based on analysis of the number of visits by type of school, the estimated length of time of initial and return visits, and time devoted to project management, based on conversations with Dave Waddell and Steve Burke. This estimate may still be refined.

## **SQG Disposal Work Group Report – Appendix A**

16. Rehab the Lab clearly has succeeded in removing chemical stockpiles from schools. However not all of the high risk chemicals identified have been removed. Also it remains to be seen whether the schools will follow through on their pollution prevention pledges and whether they will sustain their behavior over time.
17. One could argue that schools in King County have received a disproportionate level of services through the Rehab the Lab project. Despite the outstanding efforts of Program staff to institute long term behavior change by staff associated with school labs, the reality is that the turnover rate for teachers and administrative staffs is very high. It is unclear that even though school staffs pledge to change the way lab chemicals are managed whether or not we will see lasting change.
18. As of July 24, 2006 two proposals for follow-up work are under consideration by the SQG Steering Committee.

### **SQG Milk Run Pilot Projects (2003 – 2004)**

1. In the fourth quarter of 2003, the Local Hazardous Waste Management Program (LHWMP) sponsored a pilot collection program with the goal to make hazardous waste disposal convenient and not cost-prohibitive for businesses with small quantities of hazardous waste. The target audience was businesses who do not already contract with a hazardous waste hauler. The pilot program took place in the cities of Kenmore, Redmond and Federal Way.
2. LHWMP paid for the promotion, coordination, and transportation/handling costs in order to make the disposal costs comparable to what businesses would be paying if they used the drop-off facilities owned by Philip Services Corporation in Georgetown and Kent.
3. The Kenmore and Redmond areas were served by Keep It Clean Recycling. Philip Services Corporation served the Federal Way area. The businesses learned of the program through a variety of sources including direct mail, newspaper articles and word of mouth.
4. Once businesses received the information and were interested in the program, they were instructed to call the Program's Business Waste Line, where the business was screened for eligibility. To be eligible for participation in the program, the business had to meet the following criteria:
  - Be located in the pilot area
  - Have less than 2,200 pounds of waste to dispose
  - Not have a contract with a hazardous waste hauler
  - Dispose of hazardous waste no more than twice a year.
5. The Business Waste Line staff told the business how to prepare the waste for the hauler and educated the business about what to expect from the hauler. Contact information was collected and sent to the hauler. The hauler contacted the business and arranged for pick-up of the waste.
6. The businesses were offered a general cost estimate over the phone by the Business Waste Line staff, then received a more specific estimate from the hauler, and were billed directly by the hauler upon collection of the waste. The waste was transported to an approved private facility in King County. The haulers charged the LHMWP program between \$25 and \$80 for each business served to cover the cost of collection, packaging, and transportation.

## **SQG Disposal Work Group Report – Appendix A**

7. The milk run pilot enjoyed modest success in 2003. The number of participants was lower than anticipated, but the businesses that participated rated the program highly:
  - In Redmond/Kenmore, 25 business expressed interest and 14 participated in the pilot.
  - In Federal Way, seven businesses called and three participated.
8. The original budget was \$23,000. Of that, \$13,000 was spent on consultant time to develop and implement the marketing plan, provide project support and conduct a part of the evaluation. The original estimated cost of hauling was \$7,000 but only \$700 was spent. Printing of the direct mail piece cost \$2,000.
9. In 2004 a second pilot project was launched to test the effectiveness of door-to-door pickup services for SQGs. The goal of this second pilot was to improve the performance of the program by adjusting some of its components based on suggestions provided at the end of the first pilot.
10. The second pilot program took place from April through June 2004 in the cities of Tukwila, SeaTac and Shoreline. Philip Services Corporation served Tukwila and SeaTac and Shoreline was served by Emerald Recycling.
11. As with the first milk run pilot, businesses were eligible for participation in the program, if they met following criteria:
  - Were located in the pilot area
  - Had less than 2,200 pounds of waste to dispose
  - Did not have a contract with a hazardous waste hauler
  - Disposed of hazardous waste no more than twice a year.
12. Again, businesses called the Program's Business Waste Line where they were screened for eligibility. This time, if the business was eligible there were referred directly to the hauler.
13. All the recommended changes were made to the second phase of the pilot, which should have yielded a stronger response. Yet overall, fewer businesses called for information, and of those, a smaller percentage participated.
  - In Shoreline, 16 business expressed interest and 4 participated in the pilot.
  - In SeaTac and Tukwila, 18 businesses called and 4 participated.
14. Project staff concluded that it did not make sense to continue with pilots or to expand this into a permanent program. Other opportunities need to be explored for reaching the SQG population with cost-effective options for proper disposal.

### **Lamp Amnesty Project (2005)**

1. In the spring of 2005 the Program launched a program to promote recycling of fluorescent lamps. The pilot project which promoted the free recycling of fluorescent lamps among small businesses was developed to
  - Give small businesses that had not yet recycled lamps a risk-free, low cost way to get started.
  - Connect businesses with a lamp recycler.
  - Promote Program services to small businesses in King County and
  - Educate businesses about lamp recycling.

The free recycling offer ran in March and April 2005.



## SQG Disposal Work Group Report – Appendix A

2. In the pilot program, businesses received announcements, promoting free recycling of up to 25 lamps at locations provided by four vendors. The vendors were located in Seattle, Kent, Auburn, Redmond and Lynnwood. The businesses paid for any lamps they brought in beyond the first 25 and LHWMP reimbursed the four vendors the recycling costs of the first 25 that businesses brought. Educational flyers and staff worked to educate the customers as they received service.
3. The project aimed to collect 5,000 to 7,000 lamps from at least 200 businesses. In the end, 186 participants brought in 5,730 lamps, the equivalent of 0.5 lbs. of mercury. Most of the lamps were 4-foot straight tubes.
4. According to data from three of the four vendors,<sup>8</sup> 22 percent of businesses brought in fewer than 25 lamps, 18 percent brought in exactly 25 lamps, and the remaining 60 percent brought in more than 25 lamps. The numbers of “extra” lamps brought in ranged from five to as many as 400. LHWMP paid for the recycling of 3,980 of the 5,730 lamps collected, at a cost of \$1,850.
5. Overall, the project ran smoothly, met its goals and directed traffic to the vendors. The promotional strategy drove traffic to all four vendors: Ecolights (Seattle), Safety Kleen (Lynnwood and Auburn), Philip Services Corporation (Georgetown and Kent), and Keep It Clean (pick-up only).

Vendor	# of participants	# of lamps
Ecolights	88	3,369
Philip Services	16	317
Safety Kleen Auburn	26	572
Safety Kleen Lynnwood	43	942
Keep It Clean Recycling	13	530
<b>TOTAL</b>	<b>186</b>	<b>5,730</b>

6. Participant responses to the evaluation questionnaire demonstrated behavior change.
7. The project cost, including disposal was approximately \$17,900. It was implemented in-house at the Solid Waste Division with considerable planning assistance from Water and Land Resources. The project manager used a consultant to act as liaison to the vendors. Costs included:
  - Vendor payments \$1,850
  - Promotion, printing, and mailing \$7,700
  - Coordination, research, administration \$7,750
  - Lighting contractors interview \$600

Two staff members worked approximately 465 hours on the project, from October through July. The Business Waste Line completed the survey during regular phone shifts, so no extra hours were billed to the project.
8. The project’s success suggests that some of the components could or maybe should be wrapped into existing programs, but as a stand-alone program, the pilot program did not draw enough response.

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<sup>8</sup> One vendor provided totals of lamps returned but not broken down by business

## **Appendix B**

### **Information about SQG Collection Programs in the United States**

The SQG Disposal Work Group members decided to gather information about whether other programs around the country collect SQG wastes and, if they do, how the program is structured and whether they feel it is successful. Appendix B contains three documents that contain information about SQG collection programs throughout Washington and the rest of the United States. These include:

- **Appendix B-1 – Results of the SQG Survey of NAHMMA Members** (pages B-1 to B-8).
- **Appendix B-2 – Results of the Internet Survey of Similar Metropolitan areas** (pages B-9 to B-12)
- **Appendix B-3 – Information about SQG Collection Programs in Washington State** (pages B-13 to B-14) and
- **Appendix B-4 – A Focus on Four Programs that Collect SQG Waste** (pages B-15 – B19).

### **Appendix B – 1: SQG Survey Results**

On February 1, 2006 Liz Tennant sent the e-mail survey to members of North American Hazardous Materials Management Association (NAHMMA) throughout the nation. The intent of the survey was to get an overview of the state of SQG collection programs throughout the United States, to identify various approaches and models, and to know who to contact for additional information. The survey asked the following six questions:

1. Does your program accept waste from small businesses (i.e. CESQGs)?
2. Do you charge a fee for businesses to use your facility? If so, what does the fee cover?
  - Disposal costs?
  - Labor costs?
  - Administrative costs?
  - Other?
3. Do you require businesses to make an appointment prior to coming to the facility?
4. Do you think that your program is working well?
5. What “lessons learned” can you share with us?
6. Who should we call for additional information?

Responses were received from 32 programs in 13 states. The responses indicate that many programs, large and small, accept wastes from SQGs

- Twenty-three (77 %) of the respondents reported that they collect SQG wastes.
- Most (20/23) of the programs require some type of payment. The charges vary from program to program. Some charge for disposal costs only, others for labor, and others include administration costs.
- The programs described range in size and approach. For example the Yakima (Washington) program takes SQG waste for free (it is incorporated in the solid waste tipping fee). Other programs require an EPA number, an appointment, and an inventory before accepting waste.
- Many programs reported the need to promote their services and that many SQGs continue to take advantage of (free) household service, even if SQG services are available.

Appendix B-1: Results from SQG Survey of Members of the North American Hazardous Materials Management Association – February 2006

ST	County	City	Acpt ?	charges	appt?	contact	phone	e-mail address	Successful?	Lessons Learned
WI	La Crosse County		yes	yes, businesses pay disposal (by pound or unit) plus 20% markup (covers labor costs) plus \$25, \$50, \$75 per visit based on quantity	yes, after registration	JEFF GLOYD	608-789-7883	<a href="mailto:Gloyd.jeff@co.la-crosse.wi.us">Gloyd.jeff@co.la-crosse.wi.us</a>	Yes, it is my understanding that our program is one of the best (if not the best) in Wisconsin. I actively promote and recruit businesses. We provide lost, efficient service while generating revenue for our program. We are seeing about 120-150 businesses annually. Collecting about 40,000 pounds of material from these businesses and generating about \$15,000 - \$20,000 in revenue.	CESQG programs need to be convenient and easy to use. Pricing and billing should be understandable and clear. Most importantly, the fees should be very reasonable. The ways that we process waste at our site allow us to provide businesses with a very good per pound cost. Convenience gets them in the door, but service and PRICE bring them back. In addition, advertise...advertise...advertise. Many smaller businesses are still not aware they are required to properly dispose of generated wastes. Most try to comply with disposal laws once they understand them.
WA	Snohomish		yes	our actual disposal cost plus \$1.50 per gallon	yes	Jim Gustafson	425 388:6053	<a href="mailto:Jim.gustafson@co.snohomish.wa.us">Jim.gustafson@co.snohomish.wa.us</a>	yes	We refer large loads to Philip or other private sector vendors. Our service is intended to provide routine disposal of small (220 lbs or less) quantities.
WA	Clark County		yes	yes, disposal only; often work directly with contractor	yes	Jim Mansfield		<a href="mailto:Jim.Mansfield@clark.wa.gov">Jim.Mansfield@clark.wa.gov</a>	(we have a program for collection at one of our facilities w/PSC as the vendor, however when they call PSC to schedule they always end up just going to PSC's monthly collection at the PSC site here in the county.	
WA	Spokane	Spokane	no	n/a		Scott Windsor	509-625-7898	<a href="mailto:SWindsor@SpokaneCity.org">SWindsor@SpokaneCity.org</a>		Vendor provides service on County site. It works well as a private/public partnership that attempts to provide a service at minimal costs to the taxpayer. It works well for us.

**Appendix B-1: Results from SQG Survey of Members of the North American Hazardous Materials Management Association – February 2006**

ST	County	City	Acpt ?	charges	appt?	contact	phone	e-mail address	Successful?	Lessons Learned
WA	Kitsap County	Port Orchard	yes	yes	yes, after receipt of inventory	Rick Gilbert				
WA	Yakima County		yes	no	no	Wendy Mifflin	509-574-2455			
WA	Asotin County		yes	yes - disposal, labor, admin plus 7% fee	yes	Debra A. Barto	(509) 758-1965	dab-acrl@clarkston.com	yes	Check material while customer is on site, open the container or a few containers to verify what the material is.
TX	Montgomery POT3	Spring	no	n/a	n/a	Becky Cottingham	281-367-7283	rcottingham@co.montgomery.tx.us	NA	We do not currently accept CSQEG. As you collect information please let me know. We are planning to expand this summer and accept business waste.
TX	Dallas County		no	n/a	n/a	Sandra W. Cook	(214) 553-1765	SCook@dallascounty.org		it is on our radar for possible future expansion
PA	LeHigh County		no			Kurt Fenstermacher	610-799-4177 ext. 224	kurfenstermacher@lehighcounty.org		We did allow CESQG's early on, but really got hit hard with some...like painters, or some small refishing shop. Limits/procedures were not thoroughly thought out ahead of time...
OR	Multnomah County	Portland	yes	yes - covers direct disposal, labor and materials costs only	yes	Jim Quinn	503-797-1662	quinni@metro.dst.or.us	Yes	I've put a lot of this kind of thing into the SOP (attached to the e-mail).
NC	City of Greensboro		no	n/a		Eddie Raynard	336-373-7971	Edward.Raynard@greensboro-nc.gov		
KS	Sedgwick County		yes	can't tell from information	requires registration and inventory	Anglin, Kolin		kanglin@sedgwick.gov		
ID	Kookanai County		no	n/a	n/a				SQG collection available from PSC	

Appendix B-1: Results from SQG Survey of Members of the North American Hazardous Materials Management Association – February 2006

ST	County	City	Acpt ?	charges	appt?	contact	phone	e-mail address	Successful?	Lessons Learned
ID	City of Boise		yes	Businesses pay disposal costs.		Ken Wall	208-577-4736		Yes, but there are still businesses within the community that are not aware of the opportunity to dispose of wastes properly - so education is continuous.	Education is critical to program success.
IA	Scott County	Buffalo	yes	yes, covers disposal, labor, admin	yes, prefers inventory, but no turn aways	Brian Seals		bseals@waste.com	IT HAS BEEN SUCCESSFUL SINCE ITS CONCEPTION IN 1996 AND HAS BEEN GROWING SINCE	I FEEL MORE COMFORTABLE WITH A BUSINESS COMING IN IF I GET A CHEMICAL INVENTORY FROM THEM PRIOR, THAT WAY I CAN GET THEM IN AND OUT OF THE FACILITY AS FAST AS POSSIBLE.
IA	Metro Waste Authority	Bondurant	yes	yes, covers disposal, labor, admin, and supplies	yes and register	Judi Mendenhall	515-967-5512	jme@mwato-day.com	yes, we have grown the program from a yearly revenue of \$35,000 to over \$220,000 in the past 2.5 years	<p>We have found that the following have had a positive impact:</p> <ul style="list-style-type: none"> <li>-presenting to community groups through out the service area</li> <li>-offering fair, competitive pricing for small amounts. Refer them to haz waste company for larger amounts for better pricing.</li> <li>-offering exceptional customer service, pick up or drop off.</li> <li>-dedicated CESQG tech.</li> <li>-follow up system for those businesses calling in...call them back if you don't hear back from them with in a couple of weeks.</li> </ul> <p>a consistent message</p> <p>The following were less successful:</p> <ul style="list-style-type: none"> <li>-Cold calls</li> <li>-mass mailings</li> <li>-admin staff handling the initial calls</li> </ul> <p>Suggestion: Make sure you check EPA or state site for generator status of client. Many do not have a clue as to what status they are. We use a packet of information that walks them through the process. Be patient!</p>

Appendix B-1: Results from SQG Survey of Members of the North American Hazardous Materials Management Association – February 2006

ST	County	City	Acpt ?	charges	appt?	contact	phone	e-mail address	Successful?	Lessons Learned
FL	Broward County	Plantation	yes	yes, to contractor, for disposal	yes	Joel King	954-960-3023	JOELKING@broward.org	Yes	Program need may be greatly influenced by local regulatory presence. Even small CESQG's in this area are inspected by local regulatory authorities and many have disposal systems in place.
FL	Marion County		yes	no (pay contractor directly?)	no	Royette W-Bateman	(352) 671-8476	Royet.Bateman@marioncountyfl.org		we do during our shed cleanout. Our hazardous waste contractor accepts waste from CESQG's.
FL	Citrus County		yes	yes - disposal only	yes	Susan Metcalfe		Susan.Metcalfe@bocc.citrus.fl.us	Program works fairly well, but still has room for improvement.	CESQG's piggyback our bid disposal prices; Occasionally we get loads that are difficult to measure the units. Payment is also sometimes a problem. Estimating; the signer is not the presenter of check; Ask them to be specific when they make their appointment about volumes; disguising as HHW
FL	Okaloosa County		yes	yes, disposal, labor, and supplies, no admin	yes	Jim Reece	(850) 651-7395	jreece@co.okaloosa.fl.us	Not formally advertising this aspect of our program yet.	None-relatively new program
FL	Alachua County	Gainesville	yes	yes - contractor prices plus 10% for labor and admin	no	Kurt Seaburg	352-334-0440	kseaburg@alachua.fl.us	The program has worked out well for us; the businesses love the ability to dispose of waste economically and at their convenience. The main hurdle has been educating them and just getting the word out that we accept business waste.	SQG's and LQG's since they can legally dispose of non-hazardous and universal wastes through our program such as fluorescent lamps, e-scrap, used oil, filters, etc. We don't get much from them, except for some fluorescent lamps, computers, etc. We have always tried to keep it simple and not overly cumbersome for the businesses and they appreciate the service.

Appendix B-1: Results from SQG Survey of Members of the North American Hazardous Materials Management Association – February 2006

ST	County	City	Acpt ?	charges	appt?	contact	phone	e-mail address	Successful?	Lessons Learned
FL	Leon County	Tallahassee	yes	yes, disposal and labor	yes	Tom Keister	(850) 606-1816	KeisterT@leocountyfl.gov	no	CESQG hazardous waste fees should be included as part of business or occupational license fees. Get the money up front before waste generation begins. Base fees on type and amounts of hazardous waste that may be and/or will be generated by that business or occupational activity. Charging at point and time of disposal discourages participation and encourages illegal dumping.
FL	Highlands County	Sebring	no		refer to contractor	Christy Reed	(863)655-6400	creed@tmi.net	Wrote into the bid specifications that successful bidder of County's HHW contract extends same pricing to private businesses	Businesses pay contractor direct but can bring waste to County's HHW facility the day prior to and the day of the HHW collection while contractor is on site to handle waste. No business waste is accepted other than on scheduled HHW collection days.  We intervene only if needed to establish contact with County HHW contractor. Program works very well as we provide only administrative support to the business. We allow the contractor and business owner to handle the disposal process from profile to payment to remain between them.
FL	Orange County		yes	No,	yes	Oscar Ramos	407-836-6636	Oscar.Ramos@ocfl.net	yes	So far, it is running smooth. We have not had any problems or complaints. Waste is received by our contractor the first Thursday of every month. CESQGs pay directly to our contractor.

Appendix B-1: Results from SQG Survey of Members of the North American Hazardous Materials Management Association – February 2006

ST	County	City	Acpt ?	charges	appt?	contact	phone	e-mail address	Successful?	Lessons Learned
FL	Flagler County		no	n/a	n/a	Bruce Bovankovich	(386) 517-2075	bbovankovich@fcbcc.org	We use Clean Harbors as our contractor and have discussed the situation with them concerning CESQG's. Clean Harbors will extend services to the CESQG at the same contract rate and will accept the wastes at our site directly on the days they are here at our request. No one has used them yet. We do also provide them with Clean Harbors number so they can contact Clean Harbors directly and also offer to provide them with a list of alternate contractors if they wish	
CA	Santa Clara County	San Jose	yes	yes - covers disposal, labor, admin. \$40 minimum. Price list provided	yes, requires registration and inventory	Rob Darcy	408-918-1967	<a href="mailto:Rob.Darcy@deh.sccgov.org">Rob.Darcy@deh.sccgov.org</a>	No	When operating hours are restrictive you cannot get a lot of participation.
CA	Sonoma County	Santa Rosa	yes, since 1984	yes, to cover disposal, labor and admin. Added a \$25 registration fee to offset costs	yes	Lesli Daniel	707-565-3687	lesli@sonic.net	We'd like more participation, since the majority of haz waste in the solid waste is coming from businesses, not households. In 2005, we served nearly 200 businesses. Our County has a population of 480,000.	1. Despite being comparatively affordable, many CESQG's will walk away from the program as too expensive. 2. Our prices are not competitive for milk run haz waste collections for items like oil, filters, batteries, antifreeze, and fluorescent lamps. 3. Having a CESQG program does not stop businesses claiming to be households to get free disposal. 4. Hands down, the best advertising is inspectors (haz waste and fire). 5. Many CESQG's provide poor inventories, so don't guarantee pricing until you've weighted it.



Appendix B-1: Results from SQG Survey of Members of the North American Hazardous Materials Management Association – February 2006

ST	County	City	Acpt ?	charges	appt?	contact	phone	e-mail address	Successful?	Lessons Learned
CA	Novato Sanitary District	Oakland	yes	disposal only	yes	Dee Johnson		paloma@well.com	OK - Needs more publicity; and now that the State requires all these CESQG's to have an EPA ID number, participation has dropped.	More publicity - make it convenient
CA	Alameda County		yes	yes	yes, after registration and opening an account					
CA	San Diego		yes	yes	upon qualification as SQG		1-800-714-1195			
AZ	City of Flagstaff		will 7/06	\$50 first visit, \$25 after that. Plus disposal; price covers disposal, containers, and labor	yes	Andy Rehn	928-527-9005	arehn@ci.flagstaff.az.us	There is a relatively new program called the "BizMat Center" in Akron, Ohio. They charge a flat fee of \$95 for up to 220 pounds of waste.	

## **Appendix B – 2: Results of Internet Survey of Demographically Similar Areas**

In addition to seeking information through the NAHMMA survey, the SQG Disposal Work Group members decided to find out whether our demographic peers accept business wastes at their HHW facilities. We decided to see what information would be yielded by examining the Web sites of 15 metropolitan areas that mirror King County in geographical size and in population size. Alexandra Thompson did the research.

The results of the Internet survey were mixed. Half (8) of the metropolitan areas surveyed collected SQG wastes; the others appeared not to. King County (currently the 13<sup>th</sup> largest metropolitan area) and its peers (Houston, Atlanta, Miami, Phoenix and Minneapolis, 10<sup>th</sup> largest to 15<sup>th</sup> largest) do not seem to accept waste from businesses. On the other hand, other urban areas such as San Francisco, Palm Beach County and Portland Metro do accept SQG waste at their facilities. As with the NAHMMA survey, the programs vary in the types of charges, the amount of paperwork required, and frequency of service.

Appendix B-2: Results of Internet Research on Whether Demographic Peers Collect SQG Wastes

who	ST	phone	accepts	charges	restrictions	appointment	facility	frequency	URL
Houston (10th largest metro area)	TX		does not seem to take waste from businesses						
Atlanta (11th largest metro area)	GA		does not seem to take waste from businesses						
Miami (12th largest metro area)	FL		does not seem to take waste from businesses						<a href="http://www.miamidadegov/derm/land/library/florida_handbook_for_sqg.pdf">http://www.miamidadegov/derm/land/library/florida_handbook_for_sqg.pdf</a>
Phoenix (14th largest metro area)	AZ		does not seem to take waste from businesses						
Minneapolis (15th largest metro area)	MN		does not accept waste from businesses but requires every business to get a license.						<a href="http://www.hennepin.us/vgn/portal/internet/hcdetailmaster/0,2300,1273_83259_100263682,00.html">http://www.hennepin.us/vgn/portal/internet/hcdetailmaster/0,2300,1273_83259_100263682,00.html</a>
Dallas (10th largest county)	TX		the county doesn't seem to offer anything, but there seems to be some assistance from the EPA						
City of University Park	TX		Household Chemical Collection Center (HC3) take HHW but no reference to SQG						

Appendix B-2: Results of Internet Research on Whether Demographic Peers Collect SQG Wastes

Who	ST	phone	accepts	charges	restrictions	appointment	facility	frequency	URL
Snohomish	WA	425-388-6050	call for more information	yes, not on web	medical, radioactive, electronics, explosives	yes	fixed, mobile	weekly	<a href="http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SolidWaste/Haz_Waste/bushazwaste.htm">http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SolidWaste/Haz_Waste/bushazwaste.htm</a>
Kitsap/Mason	WA	360-337-5777	fill out worksheet	yes, not on web	medical, radioactive, electronics, explosives, garbage, leaking or empty containers	yes, after receipt of worksheet	fixed	weekly	<a href="http://kitsapgov.com/sw/modwaste.htm">http://kitsapgov.com/sw/modwaste.htm</a>
San Francisco	CA	415-355-3700	some info on web	yes, on web; subsidized	call to find out	yes, only	fixed	1 or 2 times a month	<a href="http://www.sfenvironment.com/aboutus/toxics/hazwaste/vsqg.htm">http://www.sfenvironment.com/aboutus/toxics/hazwaste/vsqg.htm</a>
Pinellas County	FL	727) 464-7500	<a href="http://pubgis.co.pinellas.fl.us/pcuweb_live/solid_waste/hazardous.cfm">http://pubgis.co.pinellas.fl.us/pcuweb_live/solid_waste/hazardous.cfm</a>	yes, reduced prices	Automotive/marine batteries Biological/infectious waste Empty paint cans Explosives Fire extinguishers Propane tanks Radioactive waste Smoke detectors Used motor oil	yes	fixed, mobile	fixed, quarterly; mobile, as available	<a href="http://pubgis.co.pinellas.fl.us/pcuweb_live/general/press/pressreleases/05_12_20.cfm">http://pubgis.co.pinellas.fl.us/pcuweb_live/general/press/pressreleases/05_12_20.cfm</a>
Palm Beach County	FL	697-2700	40 CFR 261.5 or exhibit specific characteristics as defined 40CFR 261.5 would apply	yes, on web, plus one time \$25 registration fee;	yes, photographic and medical	yes	fixed		

Appendix B-2: Results of Internet Research on Whether Demographic Peers Collect SQG Wastes

Who	ST	phone	accepts	charges	restrictions	appointment	facility	frequency	URL
Pima	AZ	791-4014	examples provided	yes	not listed	yes, after registering with agency and listing materials	fixed	not clear	<a href="http://www.deq.co.pima.az.us/waste/smallbusinwaste.html">http://www.deq.co.pima.az.us/waste/smallbusinwaste.html</a>
PDX Metro	PD	503-234-3000	examples provided	yes	not listed	yes, after receipt of worksheet	fixed	not clear	<a href="http://www.metro-region.org/library/docs/garbage/ceg_brochure.pdf">http://www.metro-region.org/library/docs/garbage/ceg_brochure.pdf</a>
Santa Clara	CA	408.299.7300	examples provided	yes	sharps	yes, after registration and inventory sheet	fixed	twice a month	<a href="http://www.secgov.org/SCC/docs/Environmental%20Health.%20Department%20of%20(DEP)/attachments/334336cesqgbrochure.pdf">http://www.secgov.org/SCC/docs/Environmental%20Health.%20Department%20of%20(DEP)/attachments/334336cesqgbrochure.pdf</a>

## **Appendix B – 3: SQG Collection Programs in Washington State**

The Washington State Department of Ecology produces Annual Reports on Moderate Risk Waste programs throughout the state. These reports summarize the state of moderate risk programs throughout the state. They provide data about the quantities and types of waste collected by county. Since virtually all programs in Washington State collect household hazardous wastes the residential collection data appears to be fairly reliable. The reports are less helpful in providing a clear picture about SQG collection. They provide data about the SQG waste that is collected through moderate risk waste programs, but many programs, including ours, do not collect SQG wastes. There is no clear information about the management of these wastes since the Washington Department of Ecology does not require the hazardous waste vendors to submit reports about the origin or quantity of SQG wastes that they handle.

- A summary report on the development of Moderate Risk Waste collection in Washington (1991 – 1999) can be found on the Ecology web site at <http://www.ecy.wa.gov/biblio/0007041.html>
- Ecology's subsequent Moderate Risk Waste Reports can be found on their moderate risk waste web page at: <http://www.ecy.wa.gov/programs/swfa/mrw/> . They can be downloaded as PDF files. Key findings regarding SQG collection are noted below:

### **2000 and 2001 Moderate Risk Waste Annual Reports**

- Ecology's 2000 and 2001 reports have identical numbers.
- In 2000-2001 MRW collection was 20 million pounds. Eighteen public programs collected CESQG waste.
- These Programs and Philip Services<sup>1</sup> reported collecting 1,064,361 pounds (532 tons) of CESQG waste. Dominant CESQG wastes collected were non-contaminated oil, flammable liquid, oil based paint and latex paint (70% of CESQG waste collected.)

### **2002 Moderate Risk Waste Annual Report – Ecology**

- In 2002 total MRW collection was over 24 million pounds. Twenty public MRW programs collect CESQG, 14 at fixed facilities.
- In 2002 1,395,950 (698 tons) of CESQG waste was collected. This includes data from Philip Services.

### **2003 Moderate Risk Waste Annual Report**

- In 2003 total MRW collection was over 29 million pounds. 21 public MRW programs collect CESQG, 16 at fixed facilities.
- In 2003 1,315,413 pounds (658 tons) of CESQG waste was collected. This includes data from Philip Services.

### **2004 Moderate Risk Waste Annual Report**

- In 2004 total MRW collection was over 37 million pounds. 22 public MRW programs collect CESQG, 16 at fixed facilities.
- In 2004 2,806,766 pounds (1,403 tons) of CESQG waste was collected. This includes data from Philip Services. Dominant CESQG wastes collected were non-contaminated oil, flammable liquids, oil based paint and antifreeze.

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<sup>1</sup> Philip Services operates primarily in King, Pierce and Clark counties. No other vendors reported on the quantities of CESQG waste that they handle.

**Summary of SQG Waste Collected by Washington State**

<b>Year</b>	<b>No. of programs collecting SQG waste</b>	<b>Pounds of Waste collected</b>	<b>Notes</b>
2001	18	1.1 million (532 tons)	Dominant CESQG wastes collected were non-contaminated oil, flammable liquid, oil based paint and latex paint (70% of what was collected.)
2002	24	1.4 million (698 tons)	
2003	21	1.3 million (658 tons)	
2004	22	2.4 million (1,403 tons)	Dominant CESQG wastes collected were non-contaminated oil, flammable liquids, oil based paint and antifreeze.

## Appendix B – 4: A Focus on Four Programs that Accept SQG Waste

In the course of the research, the SQG Disposal Group took a closer look at four successful programs that collect SQG wastes. We opted to look at programs in Alameda, California, Portland Oregon, Snohomish County Washington and Yakima County in Washington.

### Alameda County, California

#### Demographic and geographic overview

Alameda County is approximately the same size as King County. It is similar to the Local Hazardous Waste Management Program in King County in that it is a regional program where local agencies and jurisdictions have joined together to provide waste management services.

- Alameda County has a total population of **1,455,235 residents** who live in some **523,366 households**. There are approximately 36,468 non-farm establishments with paid employees.<sup>2</sup> King County is somewhat larger.<sup>3</sup> For additional details see: <http://quickfacts.census.gov/qfd/states/06/06001.html> .
- The program manager for Alameda’s HHW program thinks there are potentially about 10,000 CESQGs in Alameda County. He thinks most are one-time or very occasional generators.
- The Alameda Household Hazardous Waste program is a joint program between the Alameda County Waste Management Authority, which funds the program and provides board-level oversight, and the County Environmental Health Department, which owns and operates the HHW collection facilities. The Alameda County Waste Management Authority has 17 members-----14 cities, 2 sanitary districts, and Alameda County.

#### Residential and business hazardous waste collection services

Alameda County operates three collection facilities on a rotating basis. The drop-off facilities are located in Oakland, Hayward and Livermore, so they are distributed throughout the County. Staff rotates through the facility. Each facility is open at least one week per month (Wednesday – Saturday for customers.) They are not open concurrently, although approval has been given to expand the program. Bill Pollock, the HHW program manager, anticipates that next year two of the facilities will be open concurrently.<sup>4</sup>

- Alameda County is a fairly large county. People tend to use their “home facilities,” rather than drive to a more distant facility.
- Small businesses , non-profit groups, condo operators, contractors, or any other organization or commercial entity can take advantage of the drop-off program if they meet the following criteria:
  - Are located in and generate waste in Alameda County;
  - Qualify as CESQG under California law
  - Produce less than 220 lbs. or 27 gallons of all kinds of hazardous waste per month and less than 2.2 lbs. of Extremely Hazardous Waste per month.

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<sup>2</sup> According to the US Census Bureau Alameda County also has 86,380 “nonemployer” establishments. A nonemployer business is one that has no paid employees, has annual business receipts of \$1,000 or more, and is subject to federal income taxes. These generally are small businesses such as real estate agents and independent contractors. Nonemployers constitute nearly three-quarters of all businesses but they contribute only about three percent of overall sales and receipts data. They are not counted in the number of establishments. See [http://quickfacts.census.gov/qfd/meta/long\\_241683.htm](http://quickfacts.census.gov/qfd/meta/long_241683.htm).

<sup>3</sup> King County has 1,835,300 residents, 755,000 households, 60,825 private non-farm establishments with paid employees, and 129,841 nonemployer establishments.

<sup>4</sup> Bill Pollack, HHW program manager, provided most of the information about the Alameda County program in a telephone interview with Liz Tennant.



- Alameda County requires businesses to obtain an EPA idea number and a mail in a completed CESQG self-certification form. Once the form has been reviewed an account is opened and the business is able to participate in the collection program. At that point a determination is made as to whether they need to submit an inventory prior to going.
- Once a business has been accepted into the Alameda program it is provided with a transportation variance which allows the business to transport up to 220 pounds (about 27 gallons of liquid) of average weight.
- Small businesses are allowed to use the HHW facilities once they have been certified as an SQG and their paperwork has been processed. They are restricted to bringing in 220 lbs. per month.
- California law is very strict about not handling households and CESQG customers at the same time. It requires physical or temporal separation. Once the waste has been received it is commingled.
- The Alameda County program manager reports that the program served 462 CESQGs. They expect to serve 500 CESQGs in 2006. Approximately one quarter of the users are regular generators, the others are periodic, such as a shopping center that has been dumped on.
- The Alameda County program initially accepted abandoned waste without charging local governments bringing it in. They were overwhelmed and now cities have accounts.
- The Alameda program mainly charges for disposal costs. Disposal fees haven't changed since 1995.
- Alameda has a universal waste CESQG program, which is less restrictive. Businesses still are required to fill out a one page form but they aren't subject to quantity limits. They can fax their inventory in. There is a separate price list for universal wastes (e.g. fluorescent tubes and mercury devices). Businesses still complain.
- In 2005 Alameda County spent about \$77,000 to collect about 80,000 – 90,000 pounds (40-45 tons) of CESQG wastes. Most businesses that bring in wastes are on the level. Program staff have learned to be careful with warehouse companies, which often bring in weird wastes. They generally can feel out if there is likely to be a problem in which case they will send someone out to look at it.
- The Program was originally expected 16-17 CESQGs per day open (3,000 businesses per year) and staffed the business collection day with 2-3 people. They have been getting far fewer. They mostly get paint waste. They don't necessarily handle it all. They will lab pack but not bulk it. They generally work half a day to take it in and collect the money and spend the second day handling the nasty stuff.
- The Program manager thinks that CESQG collection definitely worth doing and that the Alameda program is working well.

**For more information:**

- Visit the Alameda program's web site: <http://www.stopwaste.org/home/index.asp?page=587>

## **Snohomish County, Washington**

### **Demographic and geographic overview**

Snohomish County is located to the north of King County. It is somewhat smaller than King County. It has approximately one-third of the population of King County, and much lower population density.

- Snohomish County has a total population of **655,944 residents** who live in some **264,287 households** (based on 2005 number of housing units). This is approximately one-third the population of King County.
- Snohomish County has approximately **16,346 non-farm establishments** with paid employees---less than one third of the number of private non-farm establishments in King County.

For additional details see <http://quickfacts.census.gov/qfd/states/53/53061.html>

### **Residential and business hazardous waste collection services**

Snohomish County accepts SQG wastes at its HHW Drop-off station and also at Roundup events. They strongly suggest that SQGs call for an appointment and they charge fees (disposal costs plus a county-imposed charge of \$1.50 per gallon or \$0.20 per pound).

The Snohomish program allows SQGs to bring in up to **40 gallons** at a time because “we are truly out to help the actual small businesses...This also keeps customers from accumulating materials for any length of time.”

The Snohomish program encourages businesses to fill out an inventory prior to coming in, but does not require them to obtain an ID number.

### **For more information:**

- Visit the Snohomish County Web site at:  
[http://www1.co.snohomish.wa.us/Departments/Public\\_Works/Divisions/SolidWaste/Haz\\_Waste/bush\\_azwaste.htm](http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SolidWaste/Haz_Waste/bush_azwaste.htm)
- Contact Jim Gustafson at 425-388-6053 or [Jim.gustafson@co.snohomish.wa.us](mailto:Jim.gustafson@co.snohomish.wa.us)

## **Portland, Oregon**

### **Demographic and geographic overview**

Portland’s program is operated by Metro, a regional government agency that protects open space and parks, plans for land use and transportation, and manages garbage disposal and recycling for 1.3 million residents in three Oregon counties and 25 Oregon cities. Metro, which is governed by directly elected commissioners, serves the metropolitan area in and around Portland.

- For details about Multnomah County see <http://quickfacts.census.gov/qfd/states/41/41051.html>
- For information about Metro see <http://www.metro-region.org/>

### **Residential and business hazardous waste collection services**

- Portland/Metro accepts CESQG wastes at their two drop-off facilities. Prospective CESQG customers are required to obtain an EPA identification number from Oregon DEQ and must mail in a filled-out and signed Application and Certification Form and a filled out Waste Inventory Form. Customers wishing to apply for credit must also send in a filled out Credit Application packet. Third parties can transport the waste on behalf of the generator, but Metro requires that certification be signed by the actual generator. The program gets about 500 SQG customers per year.
- Portland Metro has written guidance (Standard Operating Procedures) that describe procedures for receiving waste from generators. These SOPs provide clear guidance for accepting and tracking waste from businesses. Metro’s two HHW facilities also handle some non-household waste not received directly from the generator, such as load check waste and abandoned wastes. The procedures for those activities are described in other documents.

- Metro normally requires businesses to make an appointment prior to coming to the HHW facility, but allowances can be made in some case for drive-in customers.
- The Portland program charges businesses disposing of waste at their facilities. The charges cover disposal costs, labor and materials.
- The Hazardous waste program manager, Jim Quinn, considers the program to be successful and to be filling a real need.

### **For more information**

- Visit the Portland/Metro web site at <http://www.metro-region.org/article.cfm?articleid=580> .
- Contact Jim Quinn 503-797-1662 [quinnj@metro.dst.or.us](mailto:quinnj@metro.dst.or.us) or Rory Greenfield at [greenfieldr@metro.dst.or.us](mailto:greenfieldr@metro.dst.or.us).
- Contact Liz Tennant for copies of two conference presentations made by Rory Greenfield on Portland's CESQG program and acceptance policies.

## **Yakima County, Washington**

### **Demographic and geographic overview**

Yakima County differs quite markedly from King County. It is physically larger than King County, with land mass of 4,296 square miles (compared to 2,126 square miles). However it is much more sparsely populated.

- Yakima County has a total population of **231,586 residents** who live in some **81,643 households**. There are **approximately 4,707 non-farm establishments** with paid employees. For additional details see: <http://quickfacts.census.gov/qfd/states/53/53077.html>
- The population density in Yakima County is 51.8 persons per square mile, compared with 817 people per square mile in King County.

### **Residential and business hazardous waste collection services**

- Yakima operates a program that is free for households and businesses.
- The Yakima program prefers to have businesses inventory their products inventoried before bringing them in but the facility accepts business waste without an appointment. The facility will also accept waste after hours and customers leave waste in a designated area by the entrance of the facility.
- Yakima has marketed their program to businesses throughout the county, encouraging them to take advantage of this “free” service.
- The Yakima program has consistently brought in 44-49% of the CESQG waste that is collected by public programs in Washington.
- The Department of Ecology attributes Yakima's success to the County's policy of not charging businesses to dispose or recycle their waste.
- Yakima's moderate risk waste collection program is funded through solid waste tipping fees that are charged to both residents and businesses.

### **For more information**

- Visit the Yakima County web site at: [http://www.co.yakima.wa.us/publicservices/SW\\_Hazardous.htm](http://www.co.yakima.wa.us/publicservices/SW_Hazardous.htm)

## **Summary**

The four programs operate differently but all seem to work pretty well. None of the programs seems to be overwhelmed and reported about 500 businesses per year. Other organizations use the services. All four programs strongly encourage businesses to make appointments, charge fees, and programs require some sort of paperwork. The programs vary in terms of whether they allow businesses to use the facility at the same time as the general public.

## **Appendix C**

### **Information About King County Businesses, Generators, and Waste Disposal**

The SQG Disposal Work Group members decided to gather as much information as possible about the number of businesses in King County, with particular emphasis on the number of small quantity generators and how they are handling their waste. The group wanted to use this information to determine whether there is a need for additional collection and disposal service for King County businesses and whether there are other areas in which to improve Program services. Appendix C contains a variety of documents that summarize this information. They are organized into the following areas:

- **Appendix C-1 – General Information about King County businesses and what they pay into the Local Hazardous Waste Fund** (pages C1 – C-3)
- **Appendix C-2 – Generator data from the Washington Department of Ecology** (page C-4)
- **Appendix C-3 – Generator data from the Local Hazardous Waste Management Program** (page C-5)
- **Appendix C-4–Waste Management data from the Local Hazardous Waste Management Program** (page C-6)
- **Appendix C-5 – Summary data from Waste Composition Studies** (page C-7)
- **Appendix C-6– Summary data from suburban city business recycling events** (page C-8)
- **Appendix C-7- Illegal dumping data summary** (page C-9)
- **Appendix C-8 – Additional information about wastewater/sewer treatment** (page C-10)
- **Appendix C-9 – Shoreline Business Survey Results** (page C-11)
- **Appendix C-10 - Staff survey results** (page C-12- C-14).

Data has been updated through the end of 2006 when it has been available.

## Appendix C-1 –Information about King County businesses and what they pay into the Local Hazardous Waste Management Program

### A. Number of businesses and jobs <sup>1</sup>

There are **approximately 54,000 business** units in King County

There are approximately 1.1 million jobs in King County

- 36% of jobs are service industry
- 22% are retail/wholesale
- 14.5% are government
- 9% are manufacturing
- 7% are finance/insurance/real estate
- 5.5% are transportation/public utilities
- 5% are construction-related

For additional details and 2006 data see pages 73 and 74 of the 2006 King County Annual Growth Report, available on line at: <http://www.metrokc.gov/budget/agr/agr06/06AGRCh5all.pdf>. This provides data by sector and by city.

### B. Fees paid into the Local Hazardous Waste Fund

- In 2005 business/commercial sources paid approximately \$4 million in fees into the program. This increased to approximately **\$5.1 million in 2006** (when the fee increase took effect.)
- In 2005 a business with its own solid waste account paid at least \$81.50 into the Local Hazardous Waste Fund (more if it self-hauled to the transfer station or was a large water user.) With the fee increase that took effect January 1, 2006, the same business paid \$9.07 per month (up from \$6.77 per month), or at least **\$108.84** per year.
- Businesses with shared solid waste accounts (e.g. an office park) pay less with the amount since the fee will be prorated.

### C. Services provided by the Local Hazardous Waste Management Program in 2005

- Business Waste Line staff answered **2,350 calls**.
- The EnviroStars Program approved **39 new EnviroStars business** and **upgraded** the rating of **29 additional businesses**. (There are 352 total EnviroStar businesses in King County).
- Preliminary data indicates that IMEX had **301 new listings** in 2005. There were at least **58 exchanges** of 15.7 tons of waste, saving businesses \$85,784. Twelve of the exchanges involved 1.7 tons hazardous materials/waste, which saved the businesses approximately \$9,870. (Because of the switch to Internet listings IMEX is not able to document most of the materials exchanges that occur.)
- The Voucher Incentive Program **reimbursed 344 businesses** approximately **\$140,800** to assist them in properly managing their wastes. Fluorescent lamps constituted more than half of all vouchers reimbursed and half of all dollars paid.

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<sup>1</sup> Data from the 2005 King County Annual Growth Report, pages 73 and 74 (2003 data). This number excludes sole proprietors, corporate offices and railroad employees. According to the Washington State Employment Security Department in 2004 there were 83,306 employers in King County. <http://www.ofm.wa.gov/databook/county/king.asp>

- Field staff made **2,172** technical assistance **visits to** approximately **1,763 small quantity generators**.
- Program staff responded to **122 complaints**.
- **Other services** include the Program's web site, the Hazardous Waste Library, presentations to business groups, and coordination with suburban cities. To learn more please visit our web site at [www.govlink.org/hazwaste/business/](http://www.govlink.org/hazwaste/business/)

## Appendix C-2 – Generator data from the Washington Department of Ecology

The Washington Department of Ecology assigns state/identification numbers to businesses in Washington State.

- **Large Quantity Generators (LQGs)** and **Medium Quantity Generators (MQGs)** are required to have identification numbers and to report to Ecology on an annual basis.
- In some cases hazardous waste haulers or other vendors may require businesses to obtain a state/EPA identification number prior to transporting the businesses' wastes. This is how **small quantity generators (SQGs)** may end up on the list.
- In other cases businesses voluntarily obtain an identification number from Ecology.
- Finally, some businesses obtain identification number that do not normally generate hazardous waste may obtain a number either because of a one-time generation event, or because of the possibility that they may end up with hazardous waste at some time. These businesses may show up in Ecology's listings as non-generators called **XQGs**.

Ecology relies on the businesses involved to notify the agency that they are hazardous waste generators and to report annually to Ecology (if they are LQGs or MQGs). The generators self-report their generation status.<sup>2</sup>

Ecology maintains a list of both active and inactive generators. These can be accessed by individual facility, city and/or county at the web site <https://fortress.wa.gov/ecy/hwfacilitysearch/>.

The Washington Department of Ecology has provided Liz Tennant with updated data on the number of active and inactive generators in King County. Ms. Tennant has these files in Excel format and will be happy to provide them to interested parties. The spreadsheets can be sorted by generator status, city, zip code, etc. Because of the large number of generators this Appendix will only provide summary data:

### Summary of Active Generators in King County as of January 12, 2007

Summary of Active Generators		% of active	% of total
# of LQGs	176	16.71%	12%
# of MQGs	310	29.43%	21.00%
# of SQGs	567	53.84%	38.76%
<b>Number of hazardous waste generators</b>	<b>1053</b>	<b>99.98%</b>	<b>72%</b>
# of XQGs	410		28%
<b>Total number of active generators</b>	<b>1463</b>		<b>100%</b>

This data is very incomplete with respect to the number of small quantity generators in King County, which the Program estimates may be as high as 50,000.<sup>3</sup>

<sup>2</sup> Kathleen Kaynor of the Washington Department of Ecology provided this data and other information about how data is reported. Personal communication with Liz Tennant, Office of the Program Administrator, January 16, 2007.

<sup>3</sup> Local Hazardous Waste Management Program, Component Review, 1991-2000, notes that estimates have ranged from 20,000 (in 1990) to 50,000 (in 2001), and that most King County businesses are likely to generate some hazardous waste (Chapter 12, SQG Overview, p. 168). The Program's 2004 survey of conditionally exempt small quantity generators assumed a population of 50,000 businesses (Trudy Rolla, Local Hazardous Waste Management Program, Draft Report, Conditionally Exempt Small Quantity Generator Survey, p. 1.)



### Appendix C-3 – Generator data from the Local Hazardous Waste Management Program

The Local Hazardous Waste Management Program’s field data provides another perspective on the number and type of hazardous waste generators in King County. Many of the contacts recorded in the database should be small quantity generators, since they are the primary intended audience for technical assistance. The On-site Consultation and Audit Teams have historically focused on outreach to small quantity generators. The Survey Team has generally focused on business corridors within communities, but may have more diversity in the numbers and types of generators that they see. The field database that was queried for this analysis consists primarily of records for the On-Site Consultation and Survey Teams (Hazardous Waste Section, King County Water and Land Resources Division).

The generator status categories shown in the chart are:

- ? – Generator status was not determined.
- **BMP-C** – Best management practices conformant. Has hazardous materials but is managing according to best management practices and is not generating any regulated hazardous waste.
- **Large Quantity Generator (LQG)** – generates 2,200 pounds or more of dangerous wastes or 2.2 pounds or more of extremely hazardous waste per month, or accumulates this amount on site prior to disposal. Regulated by and reports to the Washington Department of Ecology.
- **Medium Quantity Generator (MQG)** – generates between 220 and 2,200 pounds of dangerous waste per month and accumulates less than 2,200 pounds of dangerous waste on site, including less than 2.2 pounds of extremely hazardous waste, prior to disposal. Regulated by and reports to the Washington Department of Ecology.
- A **non-generator (NQG)** typically does not generate hazardous wastes, does not have appreciable amounts of hazardous chemicals on site and is considered to pose no threat to the environment due to chemical usage.
- **OOB** – means out of business.
- **Small Quantity Generator (SQG)** –generates less than 220 pounds of dangerous waste or less than 2.2 pounds of extremely hazardous waste per month and accumulates less than 2,200 pounds of dangerous waste or less than 2.2 pounds o extremely hazardous waste on site at any time prior to disposal. SQGs are conditionally exempt from the state’s dangerous waste regulations, provided that they properly store and dispose of their hazardous wastes. Most other states refer to this group of generators as **CESQGs, or conditionally exempt small quantity generators**.

#### HAZARDOUS WASTE MANAGEMENT PROGRAM

#### SQG Summary of Initial Visits

From 01/01/200 To 12/31/2006

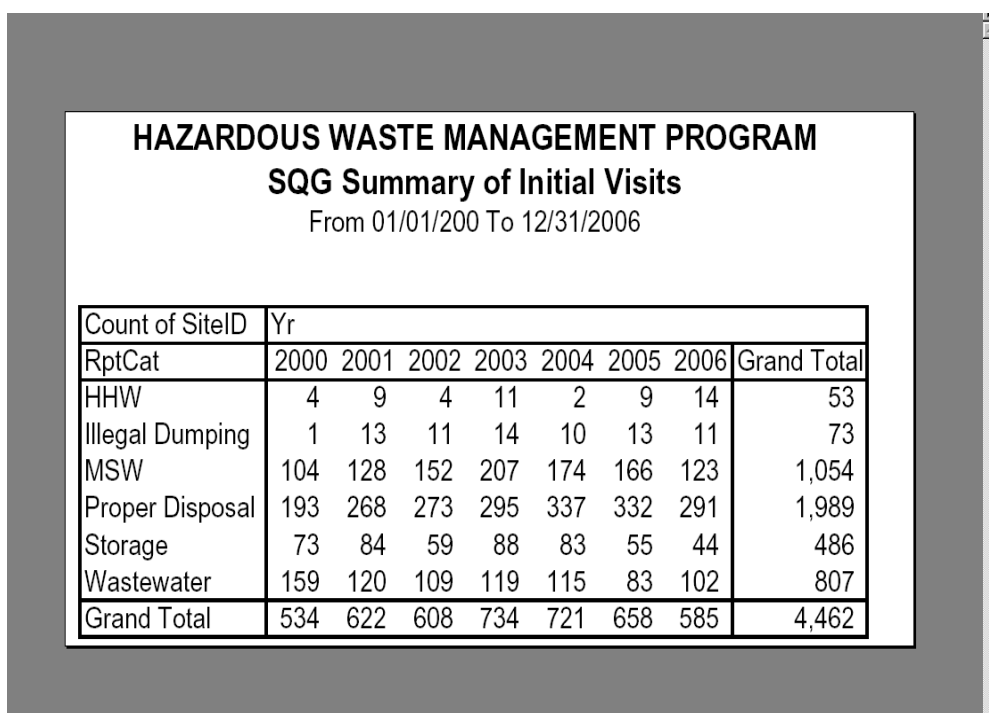
Count of SiteID	Yr							
GenStatus	2000	2001	2002	2003	2004	2005	2006	Grand Total
?	70	60	51	46	40	29	22	318
BMP-C	215	240	253	319	227	338	260	1,852
LQG	2	7		11	2	1	2	25
MQG	9	26	11	19	13	5	8	91
NQG	466	516	373	252	130	77	42	1,856
OOB							1	1
SQG	375	395	391	411	450	351	236	2,609
Grand Total	1,137	1,244	1,079	1,058	862	801	571	6,752

## Appendix C-4–Waste Management data from the Local Hazardous Waste Management Program

The SQG Disposal Work Group looked at multiple sources to see what could be learned about how SQGs are disposing of their hazardous wastes. The only direct source available was data in the field database in the Hazardous Waste Section of King County Water and Land Resources. Additional data may be available at Public Health, but it was not part of this query. It may be worth following up with Public Health to see whether such a query could be run.

This query was developed to reflect how businesses were handling their hazardous wastes at the time that Program staff first visited them. We chose this approach to better approximate how businesses that have not worked with the Program may be handling their wastes.

This screenshot shows summary data for businesses that were visited between January 1, 2000 and December 31, 2006. The query that was run includes data by city.



The screenshot displays a table with the following data:

Count of SiteID	Yr							Grand Total
	2000	2001	2002	2003	2004	2005	2006	
HHW	4	9	4	11	2	9	14	53
Illegal Dumping	1	13	11	14	10	13	11	73
MSW	104	128	152	207	174	166	123	1,054
Proper Disposal	193	268	273	295	337	332	291	1,989
Storage	73	84	59	88	83	55	44	486
Wastewater	159	120	109	119	115	83	102	807
Grand Total	534	622	608	734	721	658	585	4,462

### SQG use of Haz sheds

There is some inconsistency in Program data. According to the above query at the time they were first visited 53 businesses reported disposing of their hazardous wastes at one of the Program's household hazardous waste (HHW) collection facilities. Data provided by the Survey Team indicates that between January 2000 and January 2006, businesses reported bringing a hazardous waste to one of the HHW collection facilities 94 times. The types of wastes were antifreeze, lubricants, paints, sludge, solvents, and universal wastes. The amounts of waste ranged from a few pounds per year to several hundred. One business reported having delivered over 1000 pounds of waste to the HHW facility.<sup>4</sup>

<sup>4</sup> Data provided by Richard Thompsen, Survey Team Lead, King County Water and Land Resources Division, March 30, 2006.

## Appendix C-5 – Summary data from Waste Composition Studies

Seattle Public Utilities and King County Solid Waste Division both periodically conduct waste composition studies. These studies consistently show that hazardous waste constitutes a small percentage of the overall volume of the waste that is being sampled.

- King County's Waste Monitoring Program shows that household hazardous wastes account for 0.6% of the waste stream. When one looks at the data broken down by residential versus nonresidential sources, household hazardous waste accounts for 0.5% of the waste for residents, and 0.7% for nonresidential. Household hazardous wastes are defined as the usual wastes collected at the Wastemobile, but also includes medical waste and electronics (TVs make up about half of the tonnage). The number of tons of hazardous waste found in nonresidential waste was 2,836 tons. (2002-2003 Waste Sampling and Customer Surveys, 7, D-3);
- King County Solid Waste Division's 2002-2003 waste composition study can be accessed on line at: <http://www.metrokc.gov/dnrp/swd/about/documents/2003wastechacter-survey.PDF>
- Seattle Public Utilities' residential and commercial waste composition studies can be accessed at: [http://www.seattle.gov/util/About\\_SPU/Garbage\\_System/Reports/Waste\\_Composition\\_Reports/index.asp](http://www.seattle.gov/util/About_SPU/Garbage_System/Reports/Waste_Composition_Reports/index.asp)
- Seattle's most recent (2004) commercial waste composition report can be downloaded at: [http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/cos\\_005398.pdf](http://www.seattle.gov/util/stellent/groups/public/@spu/@usm/documents/webcontent/cos_005398.pdf)

## Appendix C-6– Summary data from suburban city business recycling events

During 2005 several suburban cities in King County sponsored special recycling events for businesses. These events generally were funded using money from Coordinated Prevention Grants. Some of the events collected fluorescent tubes. They also collected electronics, batteries and a wide variety of recyclable wastes. It does not appear that these events were reported to or funded by the Local Hazardous Waste Management Program in King County.

The table below summarizes the results of these events. Approximately 750 businesses participated in the events.

<b>2005 BUSINESS Suburban City Recycling Events</b>	<b>TOTALS</b>
<b>Date</b>	
<b>Participation Data</b>	<b>Public Involvement</b>
Number of Vehicles Participated	750
Pounds/Vehicle	123.55
<b>Material Category</b>	<b>Volume Converted into Tons</b>
Batteries	0.00
<b>Electronics</b>	45.52
<b>Fluorescent Tubes</b>	0.81
<b>Total</b>	<b>46.33</b>

Additional details can be found in a spreadsheet maintained by Morgan John of King County Solid Waste Division.

## Appendix C-7- Illegal dumping data summary

Compiled by Alexandra Thompsen, King County Solid Waste Division

Aggregate data on illegal dumping is not available at this time. This information was gathered through a series of interviews with King County and Seattle agencies. The following are snapshots of where some of the MRW is showing up. The origin of the waste is not known; therefore it is not possible to identify how much of the waste is of business versus household origin.

- Public Health’s illegal dumping data does not indicate whether the waste source was a household or a business. 99% of the complaints involve household garbage, not business hazardous waste. (Dave Hickok, Public Health)
- The King County Roads Division collected 8,000 lbs. of hazardous wastes on right-of-way property in 2005. (Source: Doug Navetski, Roads Division)
- The Department of Ecology “Litter” program collected 1,234,837 pounds of litter from King County highways in 2003. The data does not break down how much of it was hazardous.  
[http://www.ecy.wa.gov/programs/swfa/litter/pdf/northwest\\_litter\\_2003.pdf](http://www.ecy.wa.gov/programs/swfa/litter/pdf/northwest_litter_2003.pdf)
- The City of Seattle collected the following hazardous wastes in Seattle Parks from a recent year. (Jodi Sinclair):

Paints/degreasers:	830
Mixed oil/soil debris:	12,000
Petrol/soil debris:	5,250
Spent gas/cans:	300
Fertilizers/pesticides/ammonium:	150
Acids & car batteries (non-recycled):	960
Organics/corrosive:	250
Asbestos/demolition debris:	2,000
Aerosol cans w/product:	<u>100</u>
<b>Total:</b>	<b>21,840 lbs.</b>

## Appendix C-8 – Additional information about wastewater/sewer treatment

### King County regional wastewater treatment system

- King County provides wholesale wastewater treatment services to 17 cities and 17 local sewer utilities in King, Snohomish and Pierce Counties. The local agencies own and operate independent collection systems, which include pipelines and pump stations to collect and carry sewer flows in their area into the regional system for treatment and disposal. The county bills local agencies an amount that is based on the county's monthly rate and the number of customers the agency serves. In turn the local agencies bill their customers. King County embeds the local hazardous waste fee in the fee it charges the local agencies. They in turn embed it in their fees. Some local agencies list the local hazardous waste fee in their billing statement. Others do not. For a map and description of the agencies that are part of the King County regional network please see <http://dnr.metrokc.gov/WTD/mwpaac/>. This page also provides links to the component agencies.
- For general information about the King County system go to <http://dnr.metrokc.gov/WTD/>
- To learn more about the industrial pretreatment program go to <http://dnr.metrokc.gov/wlr/indwaste/> This page also provides a list of federal and county discharge limits and provides links to specific information on each topic.

### Other sewer districts in King County

- The **Lakehaven Utility District** provides water and wastewater services in the greater Federal Way area. It serves part of Burien, and most of Federal Way. For information about the Lakehaven Utility District visit <http://www.lakehaven.org/index.html>
- The **Midway Sewer District** serves the southwest portion of King County and parts of Burien. It does not have a web site. Here is a map of the district: <http://maps.citysearch.com/map/view/10746551>
- The **Southwest Suburban Sewer District** serves Burien, White Center and Normandy Park area. For additional information about the Southwest Suburban Sewer District see: <http://www.swssd.com/>

### Cities with independent sewer treatment systems:

- **Duvall**
  - [http://www.zenon.com/resources/case\\_studies/wastewater/Duvall.shtml](http://www.zenon.com/resources/case_studies/wastewater/Duvall.shtml)
  - <http://www.cityofduvall.com/departments/publicworks/publicworks.html>
- **Enumclaw**
  - [http://www.ecy.wa.gov/programs/wq/permits/permit\\_pdfs/enumclaw\\_city/enumclaw\\_fs.pdf](http://www.ecy.wa.gov/programs/wq/permits/permit_pdfs/enumclaw_city/enumclaw_fs.pdf)
- **North Bend**
  - [http://ci.north-bend.wa.us/index.asp?Type=B\\_BASIC&SEC=%7B9A0E269C-1D39-496F-B75B-3D4AEB8B9F96%7D](http://ci.north-bend.wa.us/index.asp?Type=B_BASIC&SEC=%7B9A0E269C-1D39-496F-B75B-3D4AEB8B9F96%7D)
- **Snoqualmie**
  - <http://www.ci.snoqualmie.wa.us/CityCouncilMayor/Departments/PublicWorksDepartment/WasteW ater/tabid/208/Default.aspx>

## Appendix C-9 – Shoreline Business Survey Results

### Local Hazardous Waste Management Program in King County Business Survey of 25 Shoreline Businesses February 2006

**1. What do you do with your hazardous waste now? (Circle all that apply)**

- **Have it picked up by a hazardous waste vendor:**
  - 11
  
- **Put it in the garbage:**
  - 7
  - 5 dispose of fluorescent tubes into garbage.
  
- **Take it to a Household Hazardous Waste Facility:**
  - 7
  - Of 7, 5 dispose of fluorescent tubes to HHW facility.
  - Convenience factors into usage.

**2. If you don't use a commercial hazardous waste vendor or drop-off site, why do you handle the waste the way you do?**

- 3: Did not know how to handle and had small, sporadic amounts.
- 1: Did not know it was hazardous waste

**3. If there were a facility in the north end of King County that would accept small business wastes for a fee, how likely is it that you would use it? (Circle your answer)**

Not at all likely	Somewhat likely	Likely	Quite likely	Very likely	Don't Know
9	0	1	0	15 *Of 15, 1 esp. for fluorescent tubes.	0

**Comments:**

\* 5 of those not likely to use the facility think that it is a good idea to establish one.

\* Of those not likely to use:

- 5 have their waste picked up by a vendor
- 2 said they don't have waste on site,
- 1 landlord picks it up (fluorescent tubes)
- 1 put fluorescent tubes in garbage and was going out of business in April

## C-10 – Summary of staff survey

In Spring 2006, Ray Carveth sent all staff at Public Health and Water and Land Resources an e-mail asking the following question: “As the program moves into the future, should we consider offering some form of collection services to CESQGs? If not, why not? If so, why and how?”

Seven written responses were received and one person met with Liz Tennant to discuss his perspective.

### Staff response no. 1

Interesting question.

Ahem. I know the county does not want to get into the hazwaste disposal business...HOWEVER...I have watched money thrown away for years on ill-conceived (and this is from someone who WORKS with the businesses and understands the barriers, rather than someone at a desk who is just trying to reach a specific industry or specific waste) and short term pilot projects that service specific parts of the county, and I've developed a strong opinion.

I'm a resident of Snohomish County and I use their waste disposal facilities. THEY ARE GREAT because they are easy to access, have consistent days (including weekends) and hours, take household AND business waste, and charge accordingly. Their program dollars are spent directly on waste disposal. I use it and I like it. I have encountered business owners who live in Snohomish County and have businesses in King County (saw one today, as a matter of fact) who take their business waste to Snohomish County – even though they pay a fee, it is reduced, and the business is confident that they have disposed of their waste properly. I don't know what they do for receipts/manifests, though.

I see deficiencies in the Snohomish method because the education and technical assistance portion is missing. For the King County method, the convenience and cost savings is missing.

I recently worked in Kirkland. Kirkland has an annual business waste recycling event – every Sept at Totem Lake. We started visiting in August and sent lots of businesses to the event – usually with fluorescent tubes or small quantity materials. When we continued working in Kirkland after the recycling event, we were able to tell businesses about the event coming next Sept – and they could start collecting (again, mostly tubes or a gallon or two of this or that). That provided a free/low cost disposal method that was regular, convenient, reliable and legal.

I think the best of both worlds would be to have countywide events – regularly, long term, that would accept business waste. The biggest waste problem I see is fluorescent tubes. They are a pain to dispose of.

If we did CESQG disposal – I would not accept large quantities regular waste (solvents, oil, etc) but would accept the small quantity difficult wastes like computer, rags, fluorescent tubes, fixer, etc. AND I would not stop our regular visits – because these are education and technical assistance. I think of blend of both are required to provide a true service to the county and the environment.

Thanks for the opportunity to get this off my chest.

### Staff Response No. 2.

The services available in private sector are few, pricey, aren't generally set up to work with small and sporadic quantities, and some are of questionable reputation. I believe we should offer collection at our HHW facilities - with cost being paid by the business user.



### **Staff Response No. 3.**

I think it would be great for business that

- have no waste but a few fluorescent bulbs a year
- have a very small amount of waste a year (only a couple of gallons)

We would have to figure out some threshold for this. Dentists would have too much because they generate the chairside traps weekly. But small watch repairs (I've talked to people that have 2 gallons a year) would be prime examples. It just seems ridiculous for them to call Keep It Clean and pay such high fees or spend a half a day delivering their waste to South Seattle. (Not to mention the risk of them driving it across town especially if it is flammable.)

This is exciting!

### **Staff Response No. 4**

You pose an interesting question, especially at the moment. I just got back from a LHWMP Strategic Planning "Lite" discussion, which six waste shed staff also attended. When King County's choice to split MRW between SQG and HHW and hold them to different standards came up as illogical and the cause of some of our problems (including increased costs for SQGs and possibly some of the illegal dumping we've been seeing lately), the waste shed staff seemed to have ideas and input to offer (e.g., one of the waste shed staffers said, "Make them pay."), but Jim Neely began debating policy and the facilitator changed the topic. I would like to have heard more from them.

Yes, I think we should look into this. I think this is a need of a customer base that we are not meeting. I think we need to look carefully and consider all the ramifications and that the ideas and suggestions of those staffers needs to be part of the serious discussion, not passed over lightly or ignored.

Thanks for asking.

### **Staff Response No. 5**

Short answer, yes.

Longer answer... it quickly gets complicated. I think a business should expect to pay a fee. I'd want to avoid competing with the commercial services out there who do a pretty good job of reaching many business types – such as automotive businesses, parts washers, etc. But, clearly there are lots of tiny wastestreams by tiny generators that don't seem to fit the profitability model of the commercial services. Drum-size or truckload quantities seem out. Maybe that's a way to set up a service for businesses. If they bring 5 gallons or less, pay a minimal fee & use the current HHW sites. Larger quantities – refer to the commercial services. I'm making this up as I'm writing here...

### **Staff Response No. 6.**

If not, why not? High Cost - where would we get funding? What are we not going to do to do this? Collection encourages repetitive use, instead of education or behavior change.

If so, why and how? \$ spent into the program by county businesses would go directly back to service for them.

Don't know how, but should it not be free. Should have emphasis (requirement?) for making steps to generate less HW, participate in P2, sustainable business practices, use less toxic alternatives, etc.

### **Staff Response No. 7.**

YES. There is especially a need for business's not in the Seattle area to have a place to take fluorescent tubes. Perhaps expand the haz sheds (especially the one at Factoria) collection facility?

**Staff Response No. 8.**

Comments/concerns raised during in person interview:

Things to think about if you do a collection:

- 1) If collect MRW do you become a TSD because of quantities?
- 2) You may be cutting direct service from the field. You might eliminate the need for field staff (P2)
- 3) Transportation is a big issue...can this be done safely? What about insurance?

## Appendix D

### Process for Developing, Ranking and Rating Disposal Options

The SQG Disposal Group members examined the Local Hazardous Waste Management Program's past initiatives, the results of the NAHMMA and internet surveys, the Washington Department of Ecology's Moderate Risk Waste reports and others sources. The work group members came up a broad list of approaches that LHWMP could consider with respect to SQG waste management. These ranged from maintaining the status quo to accepting SQG wastes at many different facilities, to cracking down and accepting no business wastes at all. The options included:

- A. Maintain the Status Quo
- B. Accept no business waste at our facilities.
- C. Accept or all moderate risk waste, including business waste at our facilities under various conditions (ranging from no cost to full cost to some wastes free).
- D. Don't accept waste at our facilities but subsidize the use of private collection (with various approaches evaluated).
- E. Collect some/all waste at some/all transfer stations.
- F. Allow SQG collection by a vendor at a government facility.
- G. Offer SQG collection at city events.
- H. Address fluorescent tubes through product stewardship partnering.
- I. Automatic (curbside) collection of some wastes.
- J. Mobile/Wastemobile collection service.

In many cases the SQG Disposal Work Group identified several different approaches under each option. Work group members fleshed out the options and discussed the pros and cons. By early May 2006, the workgroup had generated thirty possible waste management options and their pros and cons. During the discussion of options work group members decided:

- To learn more about four viable and different SQG collection programs (Yakima County, Snohomish County, Alameda County (CA), and Portland/Metro (OR).
- To add an option focused on promoting non-regulatory approaches to enforcement...that is, making it harder for businesses to dispose of hazardous wastes in the garbage. This became "Option K."

Work group members then went through a process of narrowing down the number of options to study more in depth. This resulted in more serious evaluation of five basic approaches, each of which had several specific sub-options. These were evaluated against ten evaluation criteria. The evaluation criteria included:

1. Whether it improves customer convenience (particularly for "back of the truck" SQGs).
2. Whether it improves regional equity.
3. Which SQGs benefit most.
4. Whether it improves customer equity.
5. Whether it has been done successfully elsewhere.
6. Whether it can be done with existing resources.
7. What the cost to the program is (\$ and staff).
8. Whether it would be financially feasible over time.
9. What the political pros and cons are.
10. Whether it would stir up union issues.

## SQG Disposal Work Group Report – Appendix D

Work group members gave each waste management option a “high,” “medium,” or “low” rating for each of the ten criteria. Once the matrix was filled out, the high, medium and low rankings were converted into a numerical equivalent. The options next were ranked from high to low. This methodology also was applied to the Status Quo option and to the other options that had previously been eliminated by the group.

When this step was completed, the work group noticed that the options fell out into some order, but that they were very close together and did not provide the group with a clear “winner.” After discussing the usefulness of the matrix, the group decided to examine the options by comparing their rankings in terms of customer service, feasibility, and organizational feasibility. The options were grouped into those sub-groups and the numbers were re-calculated.

The group was found that the highest-ranking options—those that most improved customer service, were the hardest to implement. The easiest options to implement did not significantly improve customer service. Realizing that the usefulness of the matrix likely had reached its limit, the group took a step back and decided to try to match recommendations to where the group thought the problems lay.

The waste currently is going to one or more of five places. The five destinations are:

- 1) Illegal dumping,
- 2) In the garbage (municipal solid waste stream)
- 3) Proper disposal with a hazardous waste hauler
- 4) Down the drain (into the wastewater system) and/or
- 5) Kept in storage.

We matched the recommendations to what we learned were the weak areas.

<b>Where the waste goes now</b>	<b>Recommendations to address where waste goes now</b>
Illegal dumping	Regional policy on enforcement
Garbage (municipal solid waste)	Non-government consequences (peer pressure) Screening at stations On-site inspections Working with haulers to reject loads with moderate risk waste.
Proper disposal	Improve with better and clearer information (flyers/web) on compliance and regulations.
Wastewater	Partner with wastewater facilities and others.
Storage	Education.
All destinations	Increased number of collection sites (with regional equity).

These recommendations are described in detail in the body of the SQG Disposal report.

# Appendix

## F

### Performance Measurement and Reporting

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## Appendix F: Performance Measurement and Reporting

Appendix F contains additional details about the Local Hazardous Waste Management Program's performance indicators and web based performance system.

- **Section 1** describes the development of the Program's **2007 Key Performance Indicators**. It lists the Programs performance measurement categories, criteria for selecting performance indicators, and the key performance indicators for each performance indicator.....page F-2
- **Section 2** provides examples of the **type of web-based performance reports that the Program is working towards** (pages F-14 to F-16). The sample Web pages were developed by the Spokane Community Initiatives program (<http://www.communityindicators.ewu.edu/>).....page F-14

Until such time as the new Web-based performance reports are available, the Program's regular quarterly and performance reports will be posted the Program's web site. They are also available by request from:

The Office of the Program Administrator  
Local Hazardous Waste Management Program in King County  
150 Nickerson Street. Suite 100  
Seattle, Washington 98109  
206-284-7974

## **Section 1: Development of 2007 Key Performance Indicators**

As a result of the 2006 strategic planning process, the Local Hazardous Waste Management Program in King County (LHWMP) made changes in its emphasis, direction, and mix of programs and services. The Program needed to develop ways to measure the effectiveness of these activities. This appendix describes LHWMP's new Performance Measurement Categories and Key Performance Indicators.

### **A. Performance Measurement Categories**

In 2007 the Program Evaluation Coordinator recommended establishing performance measurement categories that would capture the universe of the Program's work (old and new) and would provide feedback. The following eleven categories were proposed and approved:

#### **Influencing Laws and Regulations**

- Developing strategies to change laws to create outcomes.

#### **Changing Organizational Practices**

- Adopting policies and practices to improve health and safety. Includes NGO, Government and Schools.

#### **Fostering Coalitions and Networks**

- Bringing together groups and individuals for broader goals and greater impact.

#### **Working with Business**

- Informing and influencing business to change their practices or transmit skills and knowledge to others, either manufacturers or retail.

#### **Promoting Community Awareness & Education**

- Reaching groups of people with information and resources to promote health and safety.

#### **Strengthening Individual Knowledge, Skills, Actions**

- Enhancing an individual's capability of preventing injury or illness and promoting safety.

#### **Effecting Environmental Change**

- Improvement in environmental conditions; reducing risk to population.

#### **Developing Capacity (Research)**

- Increasing staff knowledge and skills. New initiatives require that the staff have the knowledge to carry out new activities effectively.

#### **Improving Internal Business Process**

- Service Delivery Measures (internal standards)
- Core Customer Measures:
  - Customer Satisfaction Measures
  - Quality Control Measures

## Maintaining Financial Control

- Standard Financial Measures

## B. Criteria for Selecting Performance Indicators

The Program's Evaluation Coordinator developed a long list of potential performance indicators for each performance measurement category. In April 2007 the Program's Core Team established the following criteria for selecting performance indicators. They determined that **the Program's performance indicators should be:**

### 1. Policy Relevant.

- **Linked.** Indicators are linked by activities of individuals, governments, businesses, institutions, and together as a linked set frame a holistic perspective of King County
- **Actionable.** Measures conditions or activities that can be changed in a positive direction by local actions.
- **Long term strategies & medium term action.** The set of indicators must reflect a balance between long term vision for which strategies can be developed, and short term needs for which immediate action can be taken.

### 2. Analytically Valid.

- **Measurable.** The indicator is:
  - Framed in a way that can be answered by a number, percentage, or proportion.
  - Reproducible.
  - Based on critical attributes of the system.
- **Reliable.** The data for the indicator are:
  - Measured in a consistent manner that can be repeated from one time interval to another.
  - Comparable across time and space.
- **Credible.** The indicator is credible and robust – which means that the data:
  - Are clearly defined, verifiable and scientifically acceptable.
  - Collection will use standard methodologies with known accuracy and precision (statistical accuracy).
  - Is characterized by sound collection methodologies, data management systems to protect its integrity, and quality assurance procedures
- **Tracks Trends and is predictive.** The indicator should:
  - Allow for trend analysis or provide a baseline for future trends.
  - Have predictive capabilities.



### **3. Affordable.**

- **Data availability.**
  - The indicator uses existing data and information wherever possible.
  - If data are not readily available, a practical data collection method or measurement exists or can be created.
  - The indicator requires limited numbers of parameters to be established
  - The indicator is simple to monitor

### **4. Philosophically Valid.**

- The indicator data accurately represent and measure what they are designed to measure.
- Understandable rationales exist for using the indicator and for drawing general conclusions from it.
- Think about:
  - Is the indicator truly measuring what it is meant to measure, and not a by-product?
  - Is the indicator well-grounded in fact?
  - Can you support, defend and justify it in logical or scientific terms?

### **5. Simple and easy to understand.**

- The indicator is simple to interpret, accessible, and publicly appealing.
- The indicator clearly displays the extent of the issue.
- Attractive to the media. The press publicizes them and uses them to monitor and analyze community trends.
- Think about:
  - Does it help communicate what is important?
  - Perhaps more important than providing data, indicators illustrate values and elicit reactions. Good indicators are expressed in imaginable, not eye-glazing numbers, and resonate with the intended audience.

## **C. Selection of 2007 Key Performance Indicators**

Core Team used the performance measurement selection criteria to develop the 2007 Key performance indicators listed on the following pages.

2007 Key Performance Indicators					
Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
<b>Influencing Laws and Regulations</b> Developing strategies to change laws and policies to influence outcomes	Scientific research				
	Development of "white papers" Proposed Bill analysis Draft legislation or regulation Pilots/demonstration programs Education briefings of legislators Watchdog function	Coalition formed (see Fostering Coalitions for more) Coalition - support activities by members Legislative Sponsor recruited	Work plans show issues that need white paper or legislation drafted. We will create a place holder in the Document Tracking Module to fill in when the document is created.	State Legislation changes: - legislation introduced by legislation sponsor	
	Fostering Coalition/Network (see below) Educate policy makers Developing a list of legislators that need to be reached Identifying who is best positioned to reach them Following a coordinated time table for advocacy events and efforts Monitoring progress as each legislator is won over	# issues that <u>need</u> white paper drafted # issues that <u>need</u> legislation drafted # issues that <u>have</u> white paper drafted # issues that <u>have</u> legislation drafted # Policy makers targeted, # reached # committee presentations	White paper or legislation creation will be logged into the Document Tracking Module  Policy makers will be tracked in the Contacts module  Committee presentations will be tracked in the Communication module	- Legislation adoption (e.g. ordinance, ballot measure, legislation, legally-binding agreements)  Local Regulation Change (Board of Health, County Council): - regulation introduced by sponsor - Regulation adoption	WA Legislature web site for bill tracking  BOH or County Council Minutes

## 2007 Key Performance Indicators

Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
<b>Changing Organizational Practices</b> Adopting policies and practices to improve health and safety NGO, Gov, Schools	Scientific research Development of "white papers" Development of policy proposals Pilot/demonstration programs	# issues that need white paper or policy drafted # issues that have white paper or policy drafted # Administrators targeted, # reached # Policy makers targeted, # reached # meetings with individuals # potential committee presentations # committee presentations done	Work plans show issues that need white paper or legislation drafted. We will create a place holder in the Document Tracking Module to fill in when the document is created.  White paper or legislation creation will be logged into the Document Tracking Module  Administrators, individuals and Policy makers will be tracked in the Contacts module  Committee presentations will be tracked in the Communication module	Policy change (NGO, government, school): - policy proposal, - Policy adoption - Policy implementation	- Written documentation that the authorizing body has received a policy proposal (e.g. meeting minutes) - Written documentation that the authorizing body has adopted the policy - Organizational documents reflect system change, e.g. vendor contracts
<b>Fostering Coalitions and Networks</b> Bringing together groups and individuals for broader goals and greater impact	Issue identified Potential coalition members identified Coalition members recruited Coalition charter developed	For these categories, the # targeted, the # recruited: - Individuals - Groups - Organizations - Institutions	Contacts Module will track the targeted and recruited.  We can ID their location and type of organization.	3. Strengthened Alliances  1. Strategic alliances with important partners (e.g. stronger or more powerful relationships and alliances) (important partner will be defined by	- Ally orgs support legislation / policy change - Ally orgs mobilize grassroots support. - Allies orgs Participate in lobbying Supporters - Write

**2007 Key Performance Indicators**

Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
<p><b>Working with Business</b>                      Either manufacturers or retail                      Informing and influencing business to change their practices or transmit skills and knowledge to others</p>	<p>Partnership development                      Coalition development                      Cross-sector campaigns                      Joint campaigns                      Building alliances among unlikely allies                      Educational efforts aimed at ally organizations</p>	<p>- business associations</p>		<p>project)                      2. Increased level of collaboration (e.g. coordination) – shown as percentage of targeted that are recruited</p>	<p>legislators                      Supporters - Finance lobbyists                      Supporters -contact administrative officials                      Calculation on Output data</p>
		<p># potential businesses (project identified)                      # contacted                      # businesses participate                      # people targeted for training                      # people trained                      # sites (potential) (project identified)                      # visits by area, topic                      # sites that had issues that fixed all issues (after visits)                      # total Estars                      # vouchers, voucher use</p>	<p>Field module contains business lists, with tracking for these items.                      Communication module will track people trained                      EnviroStars module tracks for Estar certification                      Voucher use report</p>	<p>% businesses targeted that participate (Participation is defined by the Project)                      % of targeted people that attend training                      % of training attendees that report that they increased knowledge of the topic                      % of training attendees that report that they will use knowledge                      % and range of satisfaction with the training.</p>	<p>Participation evidence could be:                      Adoption of policy                      Implementation of Policy - evidence as in Organizational Change</p>

**2007 Key Performance Indicators**

Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
<p><b>Promoting Community Awareness &amp; Education</b></p> <p>Reaching groups of people with information and resources to promote health and safety.</p>		<p><i>These are Interim KPI until a Communication Plan is developed for LHWMP that will include a more complete list.</i></p> <p><u>Mass Media</u> (Print: newspapers, newsletters, magazines; radio; television: commercial, public, governmental)</p> <ul style="list-style-type: none"> <li>• Story generated by:               <ul style="list-style-type: none"> <li>LHWMP</li> <li>Others</li> </ul> </li> <li>• # stories mentioning the issue</li> <li>• Total stories on the front page or in the local TV news.</li> <li>• # people receiving/viewing</li> <li>• Other measures</li> </ul>		<p>% of potential sites contacted, and/or worked with</p> <p>% of sites that implement all priority practices</p>	
				<p>The frequency and content of conversations with external sources and target audiences. That is, if they contact us for more info after seeing any of these Communication methods.</p>	

**2007 Key Performance Indicators**

Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
		<p>already tracked by "clipping service"</p> <ul style="list-style-type: none"> <li>● # held</li> <li>● # attending</li> <li>● Attendee's demographics</li> <li>● Key figures attending</li> <li>● Quality (such as a satisfaction survey of attendees).</li> </ul>			
		<p><u>Group Presentation</u> (such as at conferences, association meetings, brown-bag. Includes poster sessions (Not training - has own KPI))</p>			
		<p><u>Fairs</u> (Such as a booth at a commercial, not-for-profit, and/or community event.)</p> <ul style="list-style-type: none"> <li>● # attendees that were provided info at booth</li> </ul>			
		<p><u>Printed Material</u> (Brochures, magnets,</p>			

2007 Key Performance Indicators					
Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
<b>Strengthening Individual Knowledge, Skills, Actions</b> Enhancing an individual's capability of preventing injury or illness and promoting safety		flyers, stickers, pens, etc.) <ul style="list-style-type: none"> <li>how many were given out at presentations, fairs, mailed out, others.</li> </ul> <u>Web Site</u> <ul style="list-style-type: none"> <li>Standard info, such as web page views.</li> </ul>			
		# people at HHW Collection sites other HHW collection data Number of teachers attending workshop # calls to Natural Hotline # calls to EQT referral line # calls from people about creating IPM Plans in their towns or schools. # Hazline calls # people targeted for training	Currently, each agency is keeping this data. Eventually will be included in the web-based data system.	Indicators will be developed by project teams. Other ideas: % population served (that could generate HHW and take it to collection sites) % of potential HHW generators (households) that use sites Other ideas for HHW indicators may be in the HHW Service Level Study starting in 2007 % schools (by school type, district) represented by teachers attending workshops. % school districts that adopt the HHW component into FOSS	Calculations based on the Agency's data

**2007 Key Performance Indicators**

Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
		# people trained		<p>% of targeted people that attend training</p> <p>% of training attendees that report that they increased knowledge of the topic</p> <p>% of training attendees that report that they will use knowledge</p> <p>% and range of satisfaction with the training.</p>	
<p><b>Effecting Environmental Change</b></p> <p>Improvement in environmental conditions; reducing risk to population</p> <p>Need to quantify improvement/reduction as much as possible (e.g. tons of haz waste properly disposed)</p>		<p>weight/volume of materials properly managed by businesses worked with, by material type and management</p> <p># tons (and other HHW collection measures)</p> <p># people no longer exposed to haz material (e.g. how many people are not now exposed to leaded candy)</p>	<p>Field module will track materials management</p> <p>Agency data</p> <p>Each project that intends to reduce risk was asked to create a baseline of numbers of people exposed to the haz material, for comparison later. This is currently being kept in each projects data files; we need to incorporate this into the data management system.</p>	<p>% of businesses worked with that implement all high priority practices (as under "working with business")</p> <p>% tons of potential HHW waste produced that is collected</p> <p>% of people no longer at risk</p>	<p>Calculations on the Field module</p> <p>Calculations on the Agency HHW collection data</p> <p>Calculations on the project data for people at risk</p>



**2007 Key Performance Indicators**

Category	Activities (sample, not a complete list)	KPI for Outputs	Data source for Outputs KPI	KPI for Outcomes	Data Source for Outcomes KPI
<p><b>Developing Capacity (Research, Staff Training)</b></p> <p>Increasing staff knowledge and skills. New initiatives require that the staff have the knowledge to effectively carry out new activities.</p>	<p>Reports</p> <p>Training</p>	<p># reports on work plans</p> <p># reports completed per work plan</p> <p># policy decisions made based on reports</p> <p># staff targeted for training</p> <p># staff attending training</p>	<p>Work plans show reports that need to be completed. We will create a place holder in the Document Tracking Module to fill in when the document is created.</p> <p>Report creation will be logged into the Document Tracking Module</p> <p>Core 5 or MCC minutes reflect policy decision</p>	<p>% reports completed</p> <p>% policy decisions based on reports made</p> <p>% of targeted people that attend training</p> <p>% of training attendees that report that they increased knowledge of the topic</p> <p>% of training attendees that report that they will use knowledge</p> <p>% and range of satisfaction with the training.</p> <p>Service Delivery</p> <p>Customer Satisfaction Measures</p> <p>Quality Control Measures</p> <ul style="list-style-type: none"> <li>▪ HHW collection - hierarchy % met</li> </ul>	<p>Calculation on the Document Tracking Module data</p> <p>Calculation on the policy decisions</p>
<p><b>Improving Internal Business Process</b></p> <p>Service Delivery Measures (internal standards)</p> <p>Core Customer Measures</p>					<p>Many projects have their own measures</p>

#### **D. Refinement of the Key Performance Indicators**

The key performance indicators will be modified in the future as the performance framework is used for planning and reporting and the usefulness of these elements is determined.

#### **Section 2: Sample Web Based Performance**

The Program plans to develop Web reports in a format similar to that used by Spokane County, Washington. Examples of their reports are provided on the next three pages.

**Section 2: Sample Web Based Performance Reports from the Community Indicators Initiative of Spokane Washington**

**Community Indicators Initiative of Spokane**

**Environment**

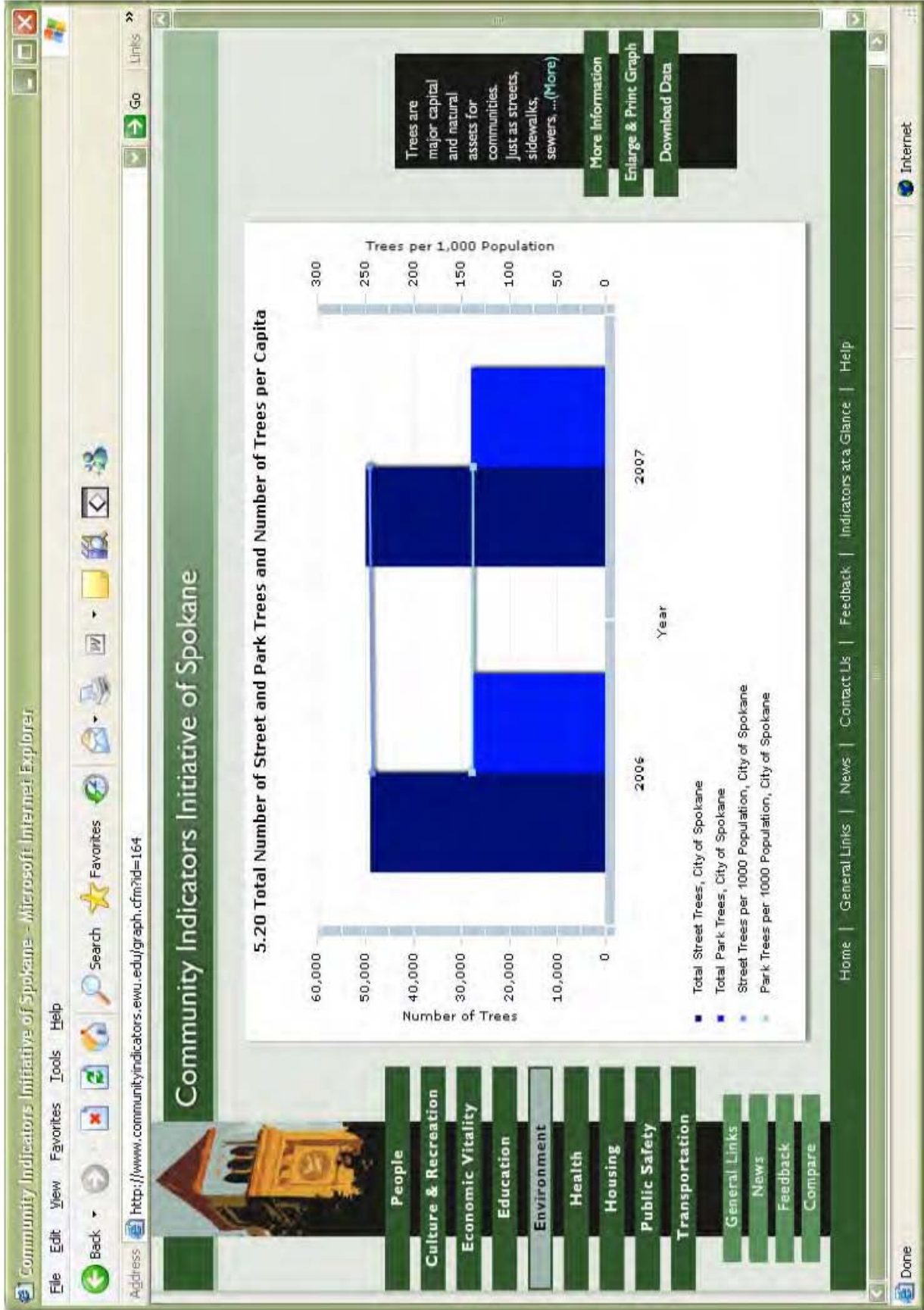
Residents of the Inland Northwest have stayed or moved here, due in part to our region's beauty and abundant natural resources. Our community no longer takes pristine water, clean air, abundant land and cheap energy for granted.

This category examines the size of some of these resources and our use of them. It is the most difficult category of community life to capture numerically. The Indicators team is working to produce other metrics already identified by our stakeholders.

5.1 Number of Good Air Quality Days	5.10 Wet Weather CSO Events	5.19 Land Use in Spokane County
5.2 Number of Carbon Monoxide Exceedences	5.11 Dry Weather CSO Events	5.20 Amount of Street and Park Trees
5.3 Annual Maximum Ozone Level	5.12 Lowest Annual River Flow	5.21 Population Density
5.4 Maximum and Average PM2.5 Levels	5.13 City of Spokane Total Water Production	5.22 Municipal Solid Waste per Person
5.5 Spokane River Overall Water Quality	5.14 City of Spokane Water Production/Capita	5.23 Percent of Recycled Solid Waste
5.6 Little Spokane and Latah Cr Water Quality	5.15 City of Spokane Drinking Water Exceedence	5.24 Non-Municipal Solid Waste per Capita
5.7 Heavy Metals in the Spokane River	5.16 Shares of Total Production of Electricity	5.25 Highway Cleanliness Index
5.8 Dissolved Oxygen Water Quality Index	5.17 Renewable Electricity Production	
5.9 Phosphorus Content Water Quality Index	5.18 Annual Electricity Consumption	


community foundation

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http://www.communityindicators.ewu.edu - Community Indicators Initiative of Spokane - Microsoft Internet Explorer



**Community Indicators Initiative of Spokane**

## 5.20 Total Number of Street and Park Trees and Number of Trees per Capita

**Why is this important?**

Trees are major capital and natural assets for communities. Just as streets, sidewalks, sewers, public buildings and recreational facilities are a community's "gray" infrastructure; publicly owned trees are part of its "green" infrastructure. Green infrastructure is porous, allowing water to soak into soil which naturally filters pollutants before entering the river and it also reduces both the rate and volume of storm-water flow. Urban trees also provide important shelter and habitat for birds and other animals who live in the city of Spokane.

In urban settings, trees reduce noise and summer temperatures. Without trees, air pollution problems are more concentrated, and the landscape is significantly altered. Trees and, collectively, the urban forest are important assets that require the same care and maintenance as other public property does.


**Where are we?**

In the City of Spokane there are currently 50,000 street trees and 28,000 park trees. On a population basis there are 246 street trees and 138 park trees per 1,000 people.

**Data Sources**

Jeff Perry  
 City of Spokane, Urban Forestry  
 tel (509) 363-5495

**5.20 Total Number of Street and Park Trees and Number of Trees per Capita**



60,000      300

Printable Page  
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# Appendix

## G

### Public Comments and Responses

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## Appendix G. Public and Staff Comments, and Responses

### Background on the Comment Process

During the process to develop this Plan Update document, the Program solicited input from our Program Partner staff, the staff from other agencies and the public at large. This input was collected in three stages. The first stage was a scoping of issues to be addressed in the Plan Update. That scoping was formally launched at a workshop on April 7, 2009, at the Renton Community Center. Invitations to the workshop were advertised widely to those parties and agencies participating in, served by, or otherwise involved with the Program. The workshop was open to the public, but targeted at individuals, businesses and agencies with some knowledge about or relationship to the Program. Representatives of the following organizations were invited to the workshop:

<ul style="list-style-type: none"> <li>• Municipal Solid Waste Management Advisory Committee</li> </ul>	<ul style="list-style-type: none"> <li>• Municipal Water Pollution Abatement Advisory Committee</li> </ul>	<ul style="list-style-type: none"> <li>• King County Unincorporated Area Councils</li> </ul>
<ul style="list-style-type: none"> <li>• commercial refuse haulers</li> </ul>	<ul style="list-style-type: none"> <li>• Muckleshoot Indian Tribe</li> </ul>	<ul style="list-style-type: none"> <li>• Snoqualmie Indian Tribe</li> </ul>
<ul style="list-style-type: none"> <li>• relevant nongovernmental organizations (NGOs)</li> </ul>	<ul style="list-style-type: none"> <li>• King County Solid Waste Advisory Committee</li> </ul>	<ul style="list-style-type: none"> <li>• local emergency planning committees (LEPCs)</li> </ul>
<ul style="list-style-type: none"> <li>• King County Solid Waste Division</li> </ul>	<ul style="list-style-type: none"> <li>• King County Board of Health and their staff</li> </ul>	<ul style="list-style-type: none"> <li>• King County Council and their staff</li> </ul>
<ul style="list-style-type: none"> <li>• Suburban City Recycling Coordinators</li> </ul>	<ul style="list-style-type: none"> <li>• Seattle Solid Waste Advisory Committee</li> </ul>	<ul style="list-style-type: none"> <li>• Seattle City Council and their staff</li> </ul>
<ul style="list-style-type: none"> <li>• City of Bellevue staff</li> </ul>	<ul style="list-style-type: none"> <li>• Seattle Public Utilities</li> </ul>	<ul style="list-style-type: none"> <li>• Seattle Drainage staff</li> </ul>
<ul style="list-style-type: none"> <li>• King County Water and Land Resources Division</li> </ul>	<ul style="list-style-type: none"> <li>• interested Sewer Districts</li> <li>• interested Suburban Cities</li> </ul>	<ul style="list-style-type: none"> <li>• Suburban Cities Association - Public Issues Committee</li> <li>• businesses organizations</li> </ul>
<ul style="list-style-type: none"> <li>• Public Health - Seattle and King County</li> </ul>	<ul style="list-style-type: none"> <li>• Seattle Drinking Water staff</li> </ul>	

Additional issues were discussed by staff during the spring and summer of 2009. To gain more scoping input from the general public, we used a combination of focus groups composed of businesses, and direct outreach to various community based organizations representing immigrants, those who do not speak English, and ESL populations. All of these sources were used to develop a set of issues and a draft table of contents for the Plan Update document.

The second stage of input was a Program Partner staff review of the first draft of the Plan Update document. A staff review draft was distributed to Program Partner staff and Suburban City Recycling Coordinators for comments during November 2009. Revisions to that first draft were made based on staff comments and a second draft was developed. This became the public comment draft which was issued in December 2010 as the Draft 2010 Plan Update.

The third stage of input was the period for public comments, comments from staff of external agencies and additional comments from Program Partner staff. The public comment period commenced on December 16, 2009. Printed copies of the Plan Update draft were mailed or delivered to members of the Seattle City Council, the King County Council, Members of the King County Board of Health, the Muckleshoot and Snoqualmie Tribes, numerous libraries throughout King County, the Management Coordination Committee, Suburban City Mayors and their staff, Suburban Sewer Districts, the King County and Seattle Solid Waste Advisory Committees, the Municipal Solid Waste Management Advisory Committee, the Metropolitan Water Pollution Abatement Advisory Committee, and a variety of other committees, agencies and individuals. In addition to distributing printed copies, downloadable PDF files of the document were posted on a special Plan Update web page within our Program web site. That site also had instructions on how to comment on the plan via a dedicated voice-mail phone line, a dedicated e-mail box and our regular mail address. Lastly, the Program solicited comments on the Plan Update in advertisements in four consecutive Friday editions in the *Seattle Times* newspaper in late January and early February. The comment period ended on February 16, 2010.

### **Public Comments and Responses**

Comments were received throughout the comment period via letters, e-mails, voice-mails and through some Facebook and Twitter posts. Those comments and responses are listed below, as well as those from the public scoping workshop. Comments are listed on the following pages by the date the comment was received and from whom, if they gave their name.



## Specific Public Comments and Responses

### 1. April 7, 2009 - Scoping Workshop Comments:

A variety of issues were raised at the scoping workshop prior to the development of the Plan Update document. Since these issues were raised prior to the development of the Plan Update document, many Chapters were based on addressing them or they were otherwise accommodated in the text. The issues raised and the Program's responses are summarized here by topic.

#### a. **Funding:**

- How stable is the Program's funding? Should the Program explore other funding sources/structures?
- Is the business rate structure fair, charging the same amount for each business regardless of its size or the amount of hazardous waste it generates?

#### **Program Response:**

The Program's funding has remained fairly stable over the life of the Program; however we intend to explore additional funding sources as described in Chapter 5. The Program is currently exploring other rate structures to address funding inequities amongst businesses and multi-family housing units.

#### b. **Structure:**

- How is the MCC structure representative of all the parties in the Program?

#### **Program Response:**

The MCC's structure is intended to include senior managers from the agencies that implement the Program's work. These senior managers jointly manage the Program's resources and staff through the MCC.

#### c. **Evaluating Performance:**

- How does the Program define success? How does it measure performance?
- Does the Program have numerical goals for HHW/SQG collected?
- Does the Program have numerical goals for percentage of MRW that is recycled?
- What service goals does the Program have? How were those goals arrived at?
- Can the Program have more numerical goals/characterizations of what proportion of the problem(s) the projects' efforts are addressing?

### **Program Response**

Evaluating Program performance is addressed in Chapter 10 and Appendix F. HHW, SQG and MRW numerical goals are discussed in those related sections of Chapter 2. The Programs goals are described in Chapter 3. Collection service level goals are described in Chapter 6, and in Appendices D and E. Performance data on HHW and SQG collection can be found in Appendix C.

#### **d. General Product Stewardship:**

- How might product stewardship (making producers absorb the cost of addressing products at the end of their life) negatively impact manufacturers and force them to move their operations overseas?
- Doesn't product stewardship create a disadvantage to US businesses/US made goods, versus goods made by business overseas?
- How can recycling costs be incorporated into the cost of doing business?
- Isn't having to pay to recycle a disincentive; how can the cost be incorporated in the purchase price?
- How can product stewardship be implemented without being mandatory? Can't incentives, training, education and advertising work without making product stewardship mandatory?

### **Program Response**

Product stewardship is addressed in Chapters 6 and 8.

#### **e. Pharmaceuticals & Unwanted Medicines**

- How can unwanted medicines be addressed?

### **Program Response**

Pharmaceuticals and unwanted medicines are addressed in Chapter 6.

#### **f. Compact Fluorescent Lamps & Fluorescent Tubes**

- How can CFLs and Fluorescent Tubes be addressed?

### **Program Response**

Compact fluorescent lamps, bulbs and tubes are addressed in Chapter 6.

#### **g. Environmental Issues**

- How does the Program address the protection of groundwater/drinking water from toxics?

- How does the Program address toxic contamination of the environment in natural disasters, such as flooding, earthquakes, etc?
- How does the Program address toxics in stormwater runoff and surface waters?

### **Program Response**

Environmental issues are addressed through a variety of the Program's projects. Descriptions of those various efforts are included in Chapters 6, 7 and 8. Disasters are addressed in Chapter 11.

### **h. Collection/Disposal**

- Where does hazardous waste go after it is collected? What is the final fate of hazardous waste?
- How much of hazardous waste is recycled or reused, and how?
- How can on-site hazardous waste drop off/collection be made feasible?
- How does the Program address alkaline battery collection and recycling?

### **Program Response**

Collection and disposal issues are addressed in Chapter 6.

### **i. Other Issues**

- How can the Program help address source control (the prevention of toxics from entering the waste streams in the first place)?
- How can a local option for hazardous waste disposal, such as mercury containing products, be brought about?

### **Program Response**

Wastewater and solid waste data and source control are discussed in Chapter 2. A variety of Program projects attempt to divert hazardous wastes from inappropriate disposal in solid waste, wastewater and stormwater systems and are described in Chapters 6, 7 and 8. Collection of hazardous waste and product stewardship are addressed in Chapter 6.

**j. Education/Training/Outreach**

- Can the Program provide technical assistance to businesses?
- How can the Program better advertise its suite of services?
- How can the Program provide for inspections?
- What methods of community outreach can the Program use?
- How can the Program get its information out to its various audiences better?
- Can the Program use staff from other programs and agencies, which interact with citizens on a daily basis, to get its messages out?

**Program Response:**

General education, training and outreach are addressed in Chapter 9. Outreach to specific audiences is also described in Chapters 6, 7 and 8.

**2. May 27, 2009 – Sue Stronk:**

- a. Requested additional collection venues and times more convenient to Newcastle.

**Program Response:**

- a. This is an operational issue that is too specific to address directly in the Plan Update. We do, however, strive to achieve the most equitable balance of services amongst the population throughout King County, within reasonable cost to the ratepayers. With regard to Newcastle, it is located in the service area for our Factoria collection facility, which is currently open eight hours per day, six days per week. In addition, the City of Newcastle usually sponsors two HHW collection events per year.

**3. May 31, 2009 – Sharon Scherer:**

- a. Asked about the Program's outreach to, inspection of, and training of staff at King County government agencies with regard to the use of toxic materials and the procurement of safer alternatives.

**Program Response:**

- a. The Program has worked with specific King County agencies on environmentally preferred purchasing and alternative products; however, we can only do so on an invited and advisory basis. We have no authority to set procurement or product use policies for any King County agency.

**4. July 31, 2009 – Christie True, Director, King County Wastewater Treatment Division:**

- a. Suggested setting numerical performance targets.
- b. Suggested tracking chemicals of concern listed by the State as priorities for Puget Sound, and prioritizing our efforts around addressing them.
- c. Suggested that the Program spend more of its budget on product stewardship.
- d. Suggested that the Program coordinate more closely with policy staff from King County Department of Natural Resources (DNRP) and Wastewater Treatment Division (WTD) on legislative efforts.
- e. Suggested increasing the Program's role in source control by coordinating more closely with Water & Land Resources Division (WLRD) NPDES staff.
- f. Suggested more emphasis on small business site inspections and technical support on wastewater source control.
- g. Suggested developing a more systematic way of gathering agency and stakeholder input into the Program's work plan priorities.
- h. Suggested that the Program add a WTD member seat on the Management Coordination Committee to ensure that wastewater issues are brought more directly into the Program's planning and management.

**Program Response:**

- a. The difficulty with setting numerical performance targets is generally described in Chapter 9 and Appendix F. Specific limitations on obtaining accurate data are described in the HHW, SQG and MRW characterization sections in Chapter 2.
- b. Chemicals of concern are not uniformly prioritized, and in some cases, not prioritized at all, by the Washington State Departments of Ecology and Health, or by the Puget Sound Partnership.
- c. The Program is attempting to shift its resources more towards upstream work including product stewardship.
- d. Our Program coordinates directly with DNRP and KCWLRD in our State Legislative work. DNRP has two seats on the MCC, one for KCSWD and one for KCWLRD.
- e. Our Program coordinates closely with KCWLRD – the Division Director is an MCC Member. Our staff have interacted in the past with both KCWLRD and SPU NPDES staff in the scoping phase of this Plan Update. We have also provided them with Program information to augment their NPDES reporting and permit renewal efforts. We also intend to meet on a regular basis with KCWTD Industrial Waste staff on additional measures we can take to help address source control for wastewater.

**Program Response to Christie True continued:**

- f. A limitation on the ability to address source control through business site visits is that there are more than 65,000 businesses in King County. The Program does not have the resources to address this huge audience through direct site visits. As such, we have shifted resources from direct business site visits to broader education and outreach efforts. The Program still conducts site visits, but they are targeted to higher risk businesses, businesses with historically underserved workers, and in environmentally sensitive areas.
- g. The Program currently obtains agency and stakeholder input on a regular basis in several of ways.
  - Program Partners provide input about the priorities of their cities and agencies. Partner agencies provide input through their Core Team members and their MCC members.
  - Program Partner staff, working in a wide variety of areas, regularly collaborate with local, state, and regional governmental staff, non-governmental organizations and community organizations.
  - The Program's Research Team monitors and reports on emerging scientific and environmental problems. Research Team members collaborate with and gather input from local, state, regional, and federal colleagues. This work is used in the Program's prioritization of work effort.
  - The Program's Evaluation Coordinator collaborates with city and county counterparts regarding data availability and performance measurement methodologies.
  - The Program's Policy Liaison works closely with others in identifying and recommending legislative priorities.
  - The Program also conducts periodic residential and business customer surveys, hosts periodic focus groups, and invites questions and input through our Web site.

All of this information is considered when the Core Team develops, and MCC approves, annual work plans. The Program Administrator is also beginning regular meetings with WTD's Industrial Waste staff to better align our efforts with regard to wastewater.

- h. Adding another member agency to the MCC would require that the King County Board of Health change their code that sets the MCC structure and assigns agency seats. King County agencies already have three of the five seats on the MCC, and two of those agencies are within DNRP, as is WTD. All MCC meetings comply with the Open Public Meetings Act and any agency may attend and raise any issue that they want during the public comment period at each meeting.

**5. January 6, 2010 – Rick Gilbert:**

- a. Praised the substantive quality of the document.
- b. Asked whether commercial SQG vendors were complaining about the Program's fee-free acceptance of SQG waste.

**Program Response:**

- a. The praise is appreciated.
- b. The fee-free acceptance of SQG waste at the Program's collection facilities and services is targeted at very small generators of hazardous waste that would not otherwise use a commercial SQG collection vendor. To the extent that we are successful in reaching that specific segment of the business community, commercial collection vendors should not be impacted.

**6. January 20, 2010 – Michael U. Derrick, General Manager, Ronald Wastewater District:**

- a. Provided extensive editorial review and comment, potential clarifications that could be made, and substantive corrections in the document.
- b. Requested that we clarify who our ratepayers are.
- c. Requested that we specify age ranges when using terms like children, young children, youth, infants, etc., in the document.
- d. Requested clarity with regard to the language used to describe our fees, the local legislative authority for those fees and the legal entities that have the authority to enact those fees.
- e. Requested clarity about causality and adult exposures to toxic materials, children's higher vulnerability to toxic materials, and environmental impacts from toxic materials.

**Program Response:**

- a. The extensive notes, comments and questions that were provided were extremely helpful in making the document clearer and more accurate, and were much appreciated.
- b. Our definition of ratepayers has been clarified in Chapter 5 with changes to the description of the surcharges that are levied to fund the Program.
- c. Age range definitions have been specified throughout the document when appropriate. In some cases, the terms that we use are purposely not defined by age ranges because those terms cover various age ranges depending on the particular project that is being described.

**Program Response to Michael U. Derrick continued:**

- d. Changes have been made to the document, in Chapter 5, which clarify our surcharges, the source of authority for those surcharges and the entities that are authorized to enact those surcharges.
- e. Changes have been made to the document, in Chapter 2 and 7, to clarify causal links between exposures to toxic materials and health impacts in adults, children and impacts to the environment. Changes have been made to the document, in Chapter 7 to explain children's higher vulnerability to toxic materials and their exposure pathways.

**7. January 22, 2010 – Don Richardson:**

- a. Offered general criticism of government bureaucracy and its cost, and of this Program as excessive.

**Program Response:**

- a. This Program is mandated by State Statute; it is not optional. We strive to address the issues within our mandate that have the highest negative impact on public health and the environment, in the most effective and efficient way possible.

**8. January 23, 2010 – Anonymous letter:**

- a. Stated that this Program was a waste of public funds, too extensive and unnecessary.

**Program Response:**

- a. This Program is mandated by State Statute; it is not optional. We strive to address the issues within our mandate that have the highest negative impact on public health and the environment, in the most effective and efficient way possible.

**9. January 24, 2010 – Anonymous voice-mail:**

- a. Suggested that the American public should cut their consumption, and its concomitant waste production, in half.

**Program Response:**

- a. We agree and hope that some of the approaches offered in Chapters 3 and 8 will help reduce consumption and waste.



**10. January 26, 2010 – Glen Boettcher, Maintenance Director, City of Mercer Island:**

- a. Strongly supported the Program's unwanted medicine return pilot projects with Bartell Drug and Group Health Cooperative. Requested assistance for the City of Mercer Island with a similar pilot collection effort.

**Program Response:**

- a. We appreciate the support for our work and the work of Bartell Drug and Group Health Cooperative. Specific assistance for medicine return is an operational issue that is not addressed in the document because of its specificity. However, Program staff members are working with a variety of local governments now on these issues, and continue to seek product stewardship legislation for unwanted medicines. We have forwarded this request to our Pharmaceutical Project Coordinator.

**11. January 29, 2010 – B & B Solomon:**

- a. Suggested more advertising of, and outreach about, the Program's garden hotline, household hazards line and efforts to inform artists of art material hazards.

**Program Response:**

- a. Advertising efforts around specific projects is an operational issue that is not addressed in the document because of its specificity. However, general outreach efforts are addressed in Chapter 9, and those project efforts are described in Chapter 7. We agree that it would be helpful to advertise these services more broadly and the Program is taking steps to do that. We have provided more information to this commenter.

**12. February 16, 2010 – Taisa Welhasch, Regional Planner & Grant Officer, Washington State Department of Ecology:**

- a. Praised the document with regard to its thoroughness in addressing all the hazardous waste planning elements in Ecology guidelines and that it is detailed and forward thinking.
- b. Provided some editorial suggestions to clarify the document's reference to State and local regulations, the State's *Beyond Waste* Plan and Ecology's enforcement program.
- c. Requested clarification and corrections regarding a hazardous waste storage and treatment site in South Seattle in Georgetown.
- d. Suggested that goals in this document to expand hazardous waste collection services conflicted with King County Solid Waste Division goals to reduce recycling collection events.

- e. Asked if any analysis was done to compare the costs of a new fixed facility versus the regular use of the Wastemobile (at the Auburn SuperMall) to address service inequities in South King County.

**Program Response:**

- a. Praise appreciated and compliance with addressing all the hazardous waste planning elements in Ecology guidelines is noted.
- b. Changes were made to the document to clarify references to State and local regulations, the State's *Beyond Waste* Plan and Ecology's enforcement program.
- c. Corrections were made to the document with regard to its reference to a Georgetown hazardous waste storage and treatment site.
- d. We believe that the goals in question are not in conflict, partly because of the differences between solid and hazardous wastes, and the way they must be managed. The King County solid waste goal merely seeks to find the most efficient method of offering services – which they believe means moving away from collection events (equivalent to our Wastemobile for hazardous waste) when other options become available, like enhanced recycling services at transfer stations, curbside collection of bulky items, and when product stewardship comes on line. We have also looked at collection service delivery efficiency and have studied mobile versus fixed facility service costs. This analysis is detailed in Appendix D – HHW Service Level Study. We are also pursuing the reduction of MRW generation via product stewardship. But we do not want to discourage the proper disposal of HHW and SQG wastes by not having enough collection services, because of the negative public health and environmental consequences of improper disposal.
- e. The analysis of the costs of fixed facilities versus the regular use of the Wastemobile at the Auburn SuperMall is addressed in Appendix D – HHW Service Level Study.

**13. February 17, 2010 – Sabrina Combs, Recycling and Public Services Projects**

**Administrator, City of Bothell:**

- a. Provided editorial comments and corrections.
- b. Requested additional information about our 2007 survey data, suburban city collection event data, information about retail Take-It-Back collection locations, program facilities and services SQG materials collection data, and safer alternatives to hazardous products lists.

**Program Response to Sabrina Combs:**

- a. Editorial comments and corrections were appreciated.
- b. The additional data that are requested are too detailed, too prone to become out of date, and are too extensive to be included in the document. That information will be provided directly to the commenter as requested.

**14. March 1, 2010 – Deborah Ritter:**

- a. Asked about options for people without cars to use the Program's HHW collection services.
- b. Expressed concern about mercury-containing lighting and the desire to have a convenient way to dispose of it so that the public would do so properly.

**Program Response:**

- a. This is an operational issue that is too detailed to be addressed directly in the document. However, this raises an issue that needs to be addressed and was noted in our 2007-2008 HHW Service Level Study.
- b. Our efforts to address the collection of mercury-containing lighting are described in Chapter 6.

All public comments are maintained in the administrative record in the Office of the Program Administrator and are available upon request.

For more information contact:

Office of the Program Administrator  
Local Hazardous Waste Management Program in King County  
150 Nickerson Street, Suite 100  
Seattle, WA 98109  
206-284-7974

# Appendix

# H

## Program Awards

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**Local Hazardous Waste  
Management Program  
In King County, Washington**

## **Program Award Summary**

**1990 - 2009**

### **1990**

- **Environmental Achievement Award**  
National Environmental Awards Council
- **Program Excellence Award**  
GRCDA Collection Excellence Program
- **IMEX – Outstanding Achievement in Waste Reduction by a Government Agency**  
KCSW, WADOE

### **1991**

- **National Achievement Award**  
National Environmental Awards Council
- **National Achievement Award (Special Merit recognition)**  
National Environmental Awards Council
- **IMEX – National Achievement Award (Special Merit recognition)**  
National Environmental Awards Council

### **1992**

- **Waste Information Network (WIN) – Regional Finalist, Administrator’s Award**  
U.S. Environmental Protection Agency

### **1994**

- **Program Excellence Award (Large Program)**  
North American Hazardous Materials Management Association
- **Moderate Risk Waste (MRW) Team Excellence Award**  
Department of Ecology
- **Ray Carveth – Outstanding Service Award**  
Shoreline Community College

## Local Hazardous Waste Program Award Summary

### 1995

- **Green Gardens Calendar (Annette Frahm) – 2<sup>nd</sup> Place, Blue Pencil Award**  
National Association of Government Communicators
- **Ray Carveth – Outstanding Service to the Business Community and the Environment**  
Snohomish County

### 1996

- **Outstanding project involving beneficial use of municipal wastewater biosolids** (shared with King County Department of Natural Resources)  
U.S. Environmental Protection Agency
- **Annette Frahm – Outstanding Member Award**  
North American Hazardous Materials Management Association
- **Ray Carveth – Outstanding Member Award**  
North American Hazardous Materials Management Association

### 1997

- **EnviroStars – Program Innovation Award**  
North American Hazardous Materials Management Association
- **Interagency Regulatory Analysis Committee (IRAC) – Program Innovation Award**  
North American Hazardous Materials Management Association

### 1998

- **Inter-agency Cooperation Award**  
Washington Department of Ecology
- **Seattle Household Hazardous Waste Facilities  
Friend of the Environment Award**  
Seattle Mayor Paul Schell and Sue Donaldson (President of Seattle city Council)

### 1999

- **EnviroStars – Governor’s Award for Outstanding Achievement in Pollution Prevention**
- **The Green Business Directory – Award in Civic Education and Public Information**  
National Association of Counties
- **Latex Paint Collection – Award in Environmental Protection and Energy**  
National Association of Counties
- **Jim Hanna – Outstanding Member Award**  
North American Hazardous Materials Management Association

## Local Hazardous Waste Program Award Summary

### 2000

- **Household Hazardous Waste School & Youth Program – Community Catalyst Award**  
Environmental Educator Association of Washington

### 2001

- **Rehab the Lab – Outstanding Achievement in Pollution Prevention and Stewardship**  
Washington State Governor's Award

### 2002

- **Contaminated Sites Program – Achievement Award**  
National Association of Counties
- **“HHW Collection on a Limited Budget” – Achievement Award**  
National Association of Counties
- **Susan McDonald – Outstanding Achievement for Commitment to Energy Efficiency**  
Seattle City Light

### 2003

- **Good Bug Guide –Stop Before You Spray (Annette Frahm) – Savvy Award**  
3CMA, the national City County Communications and Marketing Association
- **Fluorescent Lamp Campaign – Certificate of Excellence in a Public Awareness Campaign** Public Relations Society of America (PRSA)
- **Fluorescent Lamp Campaign; NW Flower & Garden Show; Rehab the Lab; and IRAC Pharmaceutical Waste Workgroup – Special Awards**  
North American Hazardous Materials Management Association
- **National Second Place Clean Water Act Recognition Award** (shared with KC Industrial Waste) U.S. Environmental Protection Agency

### 2004

- **Mercury Fever Thermometer Exchange Award of Excellence**  
Local Hazardous Waste Management Program in King County  
Public Relations Association of America
- **Dental Office Mercury Project the “Tough Nut to Crack” Award**  
Local Hazardous Waste Management Program in King Count & Industrial Waste Program  
North American Hazardous Materials Management Association

## Local Hazardous Waste Program Award Summary

### 2004

- **Factoria Pilot Household Hazardous Waste Facility  
Honorable Mention**  
Local Hazardous Waste Management Program in King County  
North American Hazardous Materials Management Association
- **Homebound Collection Program  
Better Mousetrap Award**  
For success amidst budget cuts to reconfigure a program effectively to meet the community's needs and reach out to under served populations.  
North American Hazardous Materials Management Association

### 2005

- **EnviroStars Program  
2005 Totem Awards, Certificate of Excellence**  
Local Hazardous Waste Management Program in King County  
Public Relations Society of America
- **Troublesome Site Workgroup of the Interagency Resource for  
Achieving Cooperation  
Outstanding Policy Advancement**  
North American Hazardous Materials Management Association
- **Longstanding Program Excellence  
Local Hazardous Waste Management Program in King County**  
North American Hazardous Materials Management Association
- **Mercury Switch Removal Project  
Achievement Award**  
National Association of Counties
- **Mercury Switch Removal Project  
Small Quantity Generator Pollution Prevention Award**  
North American Hazardous Materials Management Association
- Ray Carveth – **Outstanding Personal Service**  
North American Hazardous Materials Management Association
- Mike Kaufmann – **Agent of Change** for working to remove mercury-containing Dairy Manometers in King County  
North American Hazardous Materials Management Association
- Laurel Tomchick- **Agent of Change** for creating and spreading the EnviroStars program.  
North American Hazardous Materials Management Association
- **Medical Industry Waste Prevention Roundtable (MIRT, in which the Local Hazardous Waste Program participated)  
Conditionally Exempt Small Quantity Generator Pollution Prevention Award**  
North American Hazardous Materials Management Association



## Local Hazardous Waste Program Award Summary

### 2006

- Liz Tennant – **Outstanding Member Award** for work on policy issues  
North American Hazardous Materials Management Association
- **EnviroStars Business Incentive Program**  
**Most Valuable Pollution Prevention Program Award**  
Local Hazardous Waste Management Program  
National Pollution Prevention Roundtable
- Nicole Thomsen - **Outstanding Product/research** for working to reduce lead exposure in children.  
North American Hazardous Materials Management Association

### 2007

- U. S. Environmental Protection Agency, **Schools Chemical Cleanout Campaign Award**, for **Rehab the Lab Project's** work with the Federal Way School District and other Public Schools to help them address environmental and safety risks posed by laboratory chemicals.
- **Pharmaceuticals from Households: A Return Mechanism (PH:ARM project)**  
**Program Innovation**  
The Local Hazardous Waste Management Program in King County collaborating with Washington Citizens for Resource Conservation, Washington counties, law enforcement groups, consumer and medical service providers, and others.  
North American Hazardous Materials Management Association
- Dave Waddell – **Agent of Change** for making school chemical labs safer his work on LHWMP's Rehab the Lab project.  
North American Hazardous Materials Management Association

### 2008

- U. S. Environmental Protection Agency **Award** for **Rehab-the-Lab Project**.
- U. S. Environmental Protection Agency **Air Toxics Award** was given to the **Healthy Nail Salon Collaborative** (LHWMP Staff, Environmental Coalition of South Seattle and the Community Coalition for Environmental Justice.)
- Washington Department of Ecology **Quicksilver Champions Award** for establishing the **"Take-it-Back Network" for fluorescent lamps**.
- Northwest Chapter of the North American Hazardous Materials Management Association (NAHMMA) **Effective Partnership Award** for developing "A Return Mechanism for Pharmaceuticals from Households."
- Northwest Chapter of the North American Hazardous Materials Management Association (NAHMMA) **Pathfinder Award** to the **Local Hazardous Waste Management Program**.
- Northwest Chapter of the North American Hazardous Materials Management Association (NAHMMA) **Business Leadership in Hazardous Materials Reduction Award** to **Group Health Cooperative and Bartell Drugs** our two business partners in the PH:ARM project

## Local Hazardous Waste Program Award Summary

### 2009

- Northwest Chapter of the North American Hazardous Materials Management Association – (NAHMMA) **Program Excellence Award** for **the Healthy Nail Salon Project**.
- Northwest Chapter of The North American Hazardous Materials Management Association – (NAHMMA) **Nightingale Policy Advancement Award** for policy work and legislative efforts of Margaret Shield, Cheri Grasso and Suellen Mele..
- Washington State Department of Ecology **Local Source Control Partnership Recognition** of the **EnviroStars Cooperative**, which is administered by the Local Hazardous Waste Management Program in King County.

# Appendix



## State Environmental Policy Act (SEPA) Review and Determination

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**State Environmental Policy Act  
(WAC 197-11 SEPA Rules)**

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**Determination of Nonsignificance (DNS)  
and  
Environmental Checklist  
for the  
Local Hazardous Waste Management  
Program's 2010 Plan Update**

**April 15, 2010**

# WAC 197-11-970

## Determination of Nonsignificance (DNS)

**Description of proposal:**

This proposal consists of an Update of the Program's 1990 Final Plan and 1997 Plan Update. It is a programmatic action that involves no site-specific project actions. The programmatic action that is proposed is the updating of a local hazardous waste plan, promulgated under RCW 70.105.220, to address the production, use, storage and disposal of moderate risk waste (which consists of household hazardous waste and conditionally exempt small quantities of hazardous waste), and other hazardous chemicals, materials, substances and products that may or may not ultimately become hazardous waste.

**Proponent:** The Management Coordination Committee of the Local Hazardous Waste Management Program.

**Location of proposal, including street address, if any:** This proposal includes programmatic activities throughout King County, Washington.

**Lead agency:** The Management Coordination Committee of the Local Hazardous Waste Management Program.

**The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.**

- There is no comment period for this DNS.**
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.**
- This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below.**

**Comments must be submitted by:** Not applicable.

**Responsible official:** Jay L. Watson, PhD

**Position/title:** Program Administrator

**Phone:** (206) 240-5977

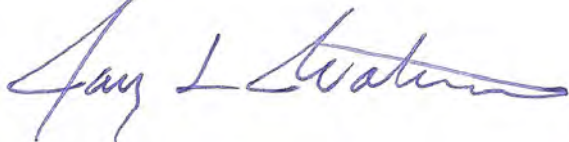
**E-mail:** jay.watson@kingcounty.gov

**Address:**

Office of the Program Administrator  
Local Hazardous Waste Management Program  
150 Nickerson Street, Suite 100  
Seattle, WA 98109-1634

**Date:** April 15, 2010

**Signature:**

A handwritten signature in blue ink that reads "Jay L. Watson". The signature is written in a cursive style with a long horizontal flourish at the end.

# WAC 197-11-960 Environmental Checklist

## SECTION A: BACKGROUND

### **1. Name of proposed project:**

Local Hazardous Waste Management Program's 2010 Plan Update.

### **2. Name of applicant:**

Management Coordination Committee (MCC)<sup>1</sup> of the Local Hazardous Waste Management Program (Program). The Program is a coalition of local governments that includes the City of Seattle, King County and 37 Suburban Cities in King County.<sup>2</sup>

### **3. Address and phone number of applicant and contact person:**

Jay L. Watson, PhD, Administrator

Local Hazardous Waste Management Program

150 Nickerson Street, Suite 150

Seattle, WA 98109-1634

e-mail: [jay.watson@kingcounty.gov](mailto:jay.watson@kingcounty.gov)

web site: [lhwmp.org](http://lhwmp.org)

phone: (206) 240-5977

fax: (206) 263-3070

### **4. Date checklist prepared:**

March 26, 2010

### **5. Agency requesting checklist:**

The Management Coordination Committee of the Local Hazardous Waste Management Program.

### **6. Proposed timing or schedule (including phasing, if applicable):**

- The 2010 Plan Update is intended to be an active document for a minimum of five years. After five years, Program staff will revisit it to determine if a new update is needed.
- The Implementation Plan (in Appendix A of the Plan Update) will be revised and implemented annually along with annual budgeting.
- The 2010 Plan Update also catalogs current and on-going activities.
- Additional activities that are listed in the 2010 Plan Update will be implemented as appropriate, and as resources permit, to address expanded problems or new issues as they arise.

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<sup>1</sup> The MCC is the legal entity that was established by King County Board of Health Code 2.08.080. It is recognized by the Washington State Department of Ecology (Ecology) as the entity that is responsible for the Program and its Plan Updates, per letter dated January 22, 1992, from Ecology, to Diana Gale, Director of the Seattle Solid Waste Utility, on behalf of the Program.

<sup>2</sup> See 2010 Plan Update, page 2-1, for a complete list of governments/agencies that participate in Program implementation.

**7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

Ecology has requested that local programs revisit their Plans every five years. The Program commits to reviewing the 2010 Plan Update in five years and discussing the need for additional Plan Updates, as appropriate with Ecology. As noted in No. 6, the Implementation Plan in the 2010 Plan Update Appendix A will be updated annually.

**8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal:**

- An Environmental Impact Statement (EIS) was completed for the original *1990 Hazardous Waste Management Plan for King County*.
- The *1997 Local Hazardous Waste Management Plan Update for King County* was issued a Determination of Significance and an Adoption of Existing Environmental Documents under WAC 197-965. However, that determination was made citing no anticipated significant changes in service, program emphasis, or funding.
- A SEPA checklist was prepared for the Factoria MRW collection facility (Transfer Station Hazardous Materials Locker) and a Determination of Nonsignificance was issued on June 7, 2001.
- No additional environmental impacts relating directly to the 2010 Plan Update, as discussed in this checklist, are anticipated. The 2010 Plan Update reflects a set of strategies that are not site-specific. Site-specific environmental review will be undertaken, as appropriate, for any projects implemented after the 2010 Plan Update is adopted, although no projects requiring such review are proposed in the 2010 Plan Update.

**9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

No applications for approvals directly affecting the 2010 Plan Update are known to be pending.

**10. List any government approvals or permits that will be needed for your proposal, if known:**

The only government approvals that are needed include the approval and adoption of the 2010 Plan Update document by the MCC and the King County Board of Health, with final approval by Ecology. No governmental permits or reviews are anticipated to implement the activities identified in the 2010 Plan Update, other than previously known permit approvals for collection facilities and services. Any actions requiring permits or review resulting from the 2010 Plan Update will be undertaken by the responsible implementing entity. No such actions are anticipated at this time.

**11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site:**

See the 2010 Plan Update's Executive Summary for additional information.



The Local Hazardous Waste Management Program (Program) was established in response to a Washington State statutory requirement {RCW 70.105.220(1)(a)} that local jurisdictions develop plans for managing hazardous wastes generated by residents, and in small quantities by businesses, schools and institutions.

This 2010 Plan Update makes current the Program's original 1990 Plan (*1990 Final Plan for the Local Hazardous Waste Management Program for King County*), as well as the 1997 Plan Update (*Local Hazardous Waste Management Plan for King County, May 1997*). The 2010 Plan Update is a set of non site-specific strategies that build on the goals and strategies of both the 1990 Plan and 1997 Plan Update. Since its inception, the Program has used a combination of technical assistance, information provision, incentives, collection services, and coordination with enforcement agencies, to encourage residents (for HHW) and conditionally exempt Small Quantity Generators (CESQGs or SQGs) to reduce their use of hazardous materials, to properly use and store them, and to properly dispose of hazardous wastes.

The 2010 Plan Update continues this focus on technical assistance, information provision, incentives, collection services and coordination with enforcement agencies. In addition, it describes the steps the Program has taken to address major issues and shifts in circumstances, since the 1997 Plan Update. It describes various issues that the Program should address, and then catalogs programmatic modifications to the Program's efforts to address these issues. Those major issues addressed by the 2010 Plan Update include:

- Overall population increases in King County and changes in the geographic distribution of that population;
- Changes in the diversity of that population and focuses on particularly vulnerable populations and historically underserved populations;
- Continuing business, school and institutional needs for service;
- Increased number, type and complexity of hazardous materials, chemicals, products and wastes, and increased understanding of those hazards;
- The need to be effective in hazardous waste reduction through preventative work 'upstream' in the manufacturing process to reduce the toxicity of products in their production stage; and
- The fact that education and voluntary efforts alone will not achieve the safe use, storage and disposal of hazardous materials.

To address those issues, various programmatic modifications are identified in the 2010 Plan Update, some of those include:

- Expanding/increasing collection services by adding an HHW facility at Factoria in 2002; shifting Wastemobile events into areas with less access and service; and offering regular Wastemobile collection services twice a month at the Auburn Supermall starting in 2009; expansion of operating hours and discontinuation of the need for drop off appointments;
- Prioritizing and increasing services to vulnerable populations including children, infants and youth, pregnant women and women of childbearing age; and historically-underserved populations including immigrants, non-English speakers or those who use English as a second language, minority cultural communities, and differently-abled or activity limited persons;

- Providing on-site technical visits and information by phone or e-mail, financial assistance through our voucher program, certification/recognition through our EnviroStars program, materials exchange through our IMEX program, and disposal assistance through our hazardous waste disposal vendors directory;
- Research to characterize emerging issues and threats, provision of information about safer alternatives to some hazardous products, and working to advance producer responsibility;
- Working to more closely coordinate the enforcement and compliance efforts of our many partners; and
- Other work to address inequities in the rate structure, better measure performance, and better address emergency management of hazardous debris from disasters.

The 2010 Plan Update also describes collection activities at three fixed collection facilities and one mobile collection service from which waste is transferred to other treatment facilities. These collection facilities and services are operated by the Program's partner agencies and are reimbursed by the Program. They are integral to the implementation of the Program and include:

Fixed facilities:

- Factoria MRW collection facility (operated by King County Solid Waste Division)
- North Seattle MRW collection facility (operated by Seattle Public Utilities)
- South Seattle MRW collection facility (operated by Seattle Public Utilities)

Mobile collection service:

- Wastemobile (operated by King County Solid Waste Division) which operates at various sites throughout the county, including twice monthly collection events in Auburn in the parking lot at the Auburn Supermall.

With the exception of the Factoria facility and Wastemobile service at the Auburn Supermall, all facilities were established before 1997 and their impacts were either addressed in the 1990 Final Plan/EIS or by environmental review and permitting by the operating agencies when they were established.

The Factoria Household Hazardous Waste (HHW) collection facility was added to the existing transfer station in late 2002 and is located at 13800 Southeast 32<sup>nd</sup> St. in Bellevue. It was designed to collect, store and transfer HHW. The HHW is collected and placed in a storage locker with other similar wastes for temporary storage. A hazardous waste contractor packs and transports the HHW from the facility. A SEPA checklist was completed for this facility on June 7, 2001, and a Determination of Nonsignificance (DNS) was issued. The SEPA checklist for the Factoria collection facility notes an expected increase in twenty-six cars per day, or a nine percent increase in vehicle traffic, as a result of establishing the facility. Additionally, no new land use permits were required by the City of Bellevue for this facility – it was deemed as being within the existing facility master use permit.

In addition to three fixed collection facilities, the Program provides mobile collection services through its Wastemobile. This is a contracted service with PSC Environmental from Kent, WA, that locates in cities and unincorporated areas outside of the Program's fixed facility service areas. It operates between March and October of each year. In 2008, the Wastemobile provided ninety-four days of collection service at nineteen sites throughout

King County. Chapter 6 of the 2010 Plan Update describes the Wastemobile service in more detail.

The Wastemobile service is permitted by Public Health - Seattle and King County. The permit requirements address state regulations {WAC 173-350-040 (1, 2, 4, and 5)} related to protecting human health and the environment, controlling water pollution and air emissions.

The Auburn Supermall Wastemobile service was added in July 2009 to address inequities identified by a service level study work group from the Program. This group found that residents of Northeast and South King County had significantly less access to collection services. The Auburn Supermall was established to provide regular, predictable, year-round collection service to South King County residents and operates for 3 days, two times a month. The volumes and usage will be evaluated periodically to determine its adequacy and whether the construction of a new fixed facility should be considered.

The Auburn Supermall Wastemobile service is also permitted by Public Health - Seattle and King County. The permit requirements address state regulations {WAC 173-350-040 (1, 2, 4, and 5)} related to protecting human health and the environment, controlling water pollution and air emissions.

Suburban Cities in King County receive Program funds annually for hazardous waste education, outreach and collection events. The cities collect a variety of HHW and offer one or more collection events every year. In 2008, twenty-seven Suburban City partners sponsored a total of forty-six HHW collection events, typically held jointly with solid waste recycling events. Permitting requirements are similar to those applied to Wastemobile events and are again the purview of Public Health – Seattle and King County.

Because the Factoria collection facility, Auburn Supermall Wastemobile events and Suburban City collection events are covered under separate SEPA or other requirements, as previously described, this SEPA review will focus on the programmatic issues and proposed approaches described at the start of this section 11. **No new collection facilities are proposed in the 2010 Plan Update.**

The 2010 Plan Update also catalogues all the non-Program run hazardous waste collection and treatment facilities in King County. **These collection and treatment facilities are operated by private entities and are beyond the scope of this SEPA review.**

The 2010 Plan Update will be implemented by the Program's agency partners, including:

- Seattle Public Utilities
- King County Department of Natural Resources and Parks
  - Solid Waste Division, and
  - Water and Land Resources Division,
- Public Health – Seattle and King County, and
- The thirty-seven participating Suburban Cities in King County.

## 12. Location of the proposal:



This map of King County (provided by King Co. DNRP GIS) shows the geographic region in which activities related to this proposal will occur. The proposal covers thirty-seven suburban cities, the City of Seattle, the Muckleshoot and Snoqualmie Indian Reservations, and all of the unincorporated areas of King County. The only area that is not covered by this proposal is the town of Milton (which is partially in King and Pierce Counties and participates in Pierce County's Hazardous Waste Management Program). The activities in the 2010 Plan Update are not site-specific.

## **SECTION B: ENVIRONMENTAL ELEMENTS**

### **1. Earth**

#### *a. General site description.*

The area affected by the 2010 Plan Update includes roughly 2,134 square miles within the boundaries of King County, WA, including thirty-seven suburban cities and the City of Seattle. This area contains three major river basins: the Snoqualmie Basin, the Cedar River Basin, and the Green/Duwamish River Basin.

This area is geographically diverse, extending from the Puget Sound lowlands in the west to 8,000 foot Mt Daniel in the Cascade Mountains. Landforms include saltwater coastline, river floodplains, plateaus, slopes and mountains.

The terrain was shaped by glaciers from the Vashon glaciations (15,000 – 20,000 years ago) when large volumes of sediment were deposited during the advance and retreat of glaciers.

b. *What is the steepest slope on the site (approximate percent slope)*

According to the Steep Slope Hazard Areas chapter of King County's Critical Areas Ordinance, steep slopes are defined as slopes greater than 40% grade and greater than 10 feet tall. King County has a variety of slopes fitting this definition. Unstable soils are common along bluffs and steep slopes, particularly along bluffs and stream and river segments. This is the result of the presence of glacial till deposited over glacial outwash during the last ice age.

c. *What general types of soils are found on the site (for example clay, sand, gravel, peat, much)? Specify the classification of agricultural soils and note any prime farmland.*

According to the Natural Resources Conservation Service (NRCS), soils throughout King County vary widely. The most recent soil survey of King County was completed in 1973. It is considered out of date but will be updated in the future<sup>3</sup>. This survey lists the following soil types in King County:

- Vashon till
- Vashon till over sandstone and shale
- Vashon till over andesite
- Recessional outwash
- Osceola mudflow
- Recent alluvium

On-line NRCS maps provide the following descriptions of soils throughout King County:

- G6: Soils with slight subsoil development
- G7: Slightly redder and deeply weathered soils than G6
- G8: Slightly redder and deeply weathered soils than G7
- MC: Medial skeletal and medial soils, most have pumice or volcanic ash influence in the upper part and formed from glacial till or colluviums

d. *Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:*

Does not apply.

e. *Describe the purpose, type and approximate quantities of any filling or grading proposed. Indicate source of fill.*

Does not apply.

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<sup>3</sup> Personal communication, Brad Duncan, Assistant State Soil Scientist, USDA

- f. *Could erosion occur as a result of clearing, construction, or use? If so, generally describe.*  
Does not apply.
- g. *About what percent of the site will be covered with impervious surfaces after project construction (for example buildings or asphalt)?*  
Does not apply.
- h. *Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.*  
Does not apply.

## 2. Air

- a. *What type of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities (if known)*

In the short-term, there may be a slight increase in vehicle emissions from additional vehicle trips by Small Quantity Generators (SQGs) and homeowners transporting HHW, as well as from licensed hazardous waste transporters removing the waste from the fixed facilities and transporting it to facilities where it can be processed, recycled and disposed of.

In the long-term, it is anticipated that the 2010 Plan Update will result in steady to reduced air emissions. This is due to the programmatic shift to focus “upstream” to the design/manufacturing stages to reduce production of hazardous materials and products by promoting producer responsibility and product redesign. A reduction in hazardous materials in the waste stream translates to reduced car trips delivering materials to collection sites, and reduced need to process and transfer those materials from collection sites.

- b. *Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.*  
No.
- c. *Proposed measures to reduce or control emissions or other impacts to air, if any:*  
Does not apply.

### **3. Water**

#### **a. Surface Water**

##### **1. Water body on or near the site**

King County has a large number of water bodies, including:

- Over fifty miles of marine shorelines;
- Three major river basins (Green/Duwamish, Snoqualmie, and Cedar);
- Two major lakes (Lake Washington and Lake Sammamish); and
- Hundreds of streams, smaller rivers, and wetlands.

##### **2. Work in, on or near the water**

The 2010 Plan Update proposes no new activities that would require work in or adjacent to the water bodies described under No. 3.a.1 of this checklist.

##### **3. Water body fill or dredge**

Does not apply.

##### **4. Surface water withdrawals and diversions**

Does not apply.

##### **5. Floodplain**

Does not apply.

##### **6. Discharge of waste**

Does not apply.

#### **b. Ground Water**

##### **1. Ground water withdrawals and discharges**

Does not apply.

##### **2. Waste discharges to ground**

Does not apply.

#### **c. Water runoff (including stormwater)**

##### **1. Runoff source and flow**

Does not apply.

##### **2. Waste or contamination of runoff**

Does not apply.

#### **d. Proposed measures to reduce or control surface, ground and runoff water impacts.**

Does not apply.

#### **4. Plants**

- a. Types of vegetation.**  
Does not apply.
- b. Vegetation removal or alteration.**  
Does not apply.
- c. Threatened and endangered species.**  
Does not apply.
- d. Vegetation mitigation**  
Does not apply.

#### **5. Animals**

- a. Types of animals**  
Does not apply.
- b. Threatened and endangered species**  
Does not apply.
- c. Animal migration routes**  
Does not apply.
- d. Wildlife mitigation**  
Does not apply.

#### **6. Energy and Natural Resources**

- a. Types of energy**  
Does not apply.
- b. Solar power interference**  
Does not apply.
- c. Mitigation**  
Does not apply.

#### **7. Environmental Health**

- a. Existing or suspected contamination at the site.**

The Program mitigates regional hazards by working to reduce the production and use of hazardous materials, by promoting their proper use and storage, and by offering disposal services at its collection facilities.<sup>4</sup> The Program's role in hazard mitigation, and the federal and state regulatory requirements regarding hazardous waste, is described in detail in Chapter 11 of the 2010 Plan Update.

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<sup>4</sup> 2010 Plan Update, page 11-13.



All of the Program's hazardous waste collection facilities, described under No. A.11 of this checklist, and Chapter 6 of the 2010 Plan Update, have gone through environmental review and permitting and are operated to reduce or eliminate the risk of spills.

#### Factoria collection site

A SEPA checklist was completed for the Factoria collection site and a DNS was issued. The checklist contains detailed information regarding the safety and emergency procedures used at the site to reduce the risk of exposure to toxic chemicals, fire and explosion risks, and spill of hazardous waste. A brief summary of the safety procedures includes:

- Site staff receive twenty-four hours of classroom training and sixteen hours of field training to learn the proper operation and management of the facility.
- Protective clothing is required, and staff is trained on its use.
- Strict guidelines are used by site staff in the transfer of waste from customers, including mitigation procedures if a spill should occur.
- Secondary containment is provided during transfer operations in case of a spill.
- Regularly scheduled vendor transport of materials from the storage locker occurs. Explosive or flammable materials do not stay on site longer than three days.

Additionally, site procedures include detailed descriptions of the classes of hazardous materials collected at the site, as well as the storage and transfer procedures associated with each of them. The Factoria Collection facility is also under permit, and inspected by Public Health - Seattle and King County. The permit requirements include site inspection criteria that address a variety of state regulations {WAC 173-350-360(5), numerous sections}. These cover prevention of unauthorized access, appropriate signage, secondary containment, chemical compatibility issues, consolidation of flammables and combustibles, and a variety of other safety measures.

#### Auburn Supermall collection service

The Auburn Supermall Wastemobile service is also permitted by Public Health - Seattle and King County. The permit requirements similarly address state regulations {WAC 173-350-040 (1, 2, 4, and 5)} related to protecting human health and the environment, controlling water pollution and emissions.

#### **1. Emergency services.**

Chapter 11 of the 2010 Plan Update describes the Program's focus on mitigating hazards through the pursuit of its regular mission, which is working to reduce purchase and inventories, promote proper storage, and promote disposal at one of its collection sites before the flood season or other likely emergency events. Its focus is not on responding during an emergency; that is the role of its Program partner agencies who operate the Program funded collection facilities and services. Those agencies are King County Solid Waste Division and Seattle public Utilities.

In addition to providing on-going projects that support the Program's goals, the Program addresses hazards reduction in areas that are faced with potential emergencies, such as floods. The 2010 Plan Update provides examples of this, including a description of a 2009 collaboration with Program staff, Public Health and other King County agencies to develop coordinated messages regarding preparing for potentially serious flooding in the Green River Valley. The Program also plays a support role during the recovery phase when disaster generated debris must be managed.

#### Factoria collection facility

The Factoria collection facility has a Hazardous Materials Emergency Response Plan in place that identifies specific emergency response procedures and scenarios. The SEPA checklist completed for this collection facility includes detailed information about emergency planning, including:

- The Bellevue Fire Department and Hazmat Team were provided with the hazardous chemical inventory and will visit the facility to become familiar with the potential hazards.
- Site staff are trained in emergency response and spill cleanup procedures to supplement the emergency response services provided by hazardous waste transporter vendors under contract to King County.

Additional permitting/environmental analysis done for the Factoria collection facility includes:

- In 1995, SCS Engineers completed an environmental site investigation report. The investigation included some of the area around the existing station.
- Building, electrical and fire permits.

#### Auburn Supermall Wastemobile

Public Health – Seattle and King County permit requirements for the Auburn Supermall Wastemobile service cover a number of issues related to emergency services. Specifically, those permit operating standards require that waste be processed and handled in an approved timeline, with an approved method, and that it is overseen by trained staff. It also requires that fire protection be provided, that spill/leakage prevention and spill kits be available, that staff be trained, and that a safety program exist. Finally, the permit requirements for recordkeeping require incident and emergency notifications be made.

## 2. **Mitigation.**

Both the Factoria collection facility and Auburn Supermall collection service have detailed mitigation measures to reduce or control environmental health hazards.

The SEPA checklist completed for the Factoria collection facility includes detailed information of proposed measures to reduce or control environmental health hazards, including:

- Staff are required to attend in-classroom and field training to learn the proper operation and management of the program;
- To prevent chemicals from coming in contact with site staff, all site personnel must wear Personal Protective Equipment (PPE) that includes Tyvek coveralls, safety glasses, and numerous other items;
- To avoid potential for chemical reactions, wastes will be sorted after they have been unloaded, and then placed in the appropriate container or cabinet within the storage locker;
- Unlabeled materials will be safely stored, and a contracted vendor will perform tests to characterize the waste to determine its proper packing container and label;
- Storage lockers are equipped with dry-chemical fire suppression systems with head activated triggers. These are tested annually. Additionally, there are portable fire extinguishers mounted on the support posts for the transfer station roof;
- Proper signage exists throughout the site to reduce spill incidents; and
- Site staff are trained in emergency response and spill cleanup procedures.

For the Auburn Supermall, Public Health – Seattle and King County permit conditions require a range of mitigation measure to reduce or control environmental health hazards, including:

- Performance standards that ensure the facility does not pose a threat to human health or the environment, and that it complies with a variety of WACs related to water pollution and emissions;
- Record keeping that allows for inspection, requires operating and inspection records, and testing and monitoring requirements, and incident/emergency notification;
- Waste provisions that require waste volumes within approved limits, appropriate containers and labeling;
- Operating standards that require traffic control, attendants, prohibition and control on scavenging and salvaging;
- Facility and vehicle standards that require protection of surface and groundwater, secondary containment, stormwater control, leachate control, and a variety of other controls including fire protection, monitoring wells and signage;
- Safety and environmental protection standards that require spill kits, appropriate staff training; and
- General standards that require the control of nuisances, protection of the public through fencing and restricted access; control of dust and other odors.

**b. Noise**

**1. Noise in the area**

Does not apply.

**2.Noise from the proposal**

Does not apply.

**3.Mitigation for noise**

Does not apply.

**8. Land and Shoreline Use**

**a. Current uses**

Does not apply.

**b. Agricultural uses**

Does not apply.

**c. Structures**

Does not apply.

**d. Demolition**

Does not apply.

**e. Zoning**

Does not apply.

**f. Comprehensive plan designation**

Does not apply.

**g. Shoreline master program designation**

Does not apply.

**h. Environmentally sensitive area**

King County has a large number of environmentally sensitive areas. Adoption and implementation of the 2010 Plan Update is not anticipated to affect any of these areas.

**i. Persons living or working onsite**

Does not apply.

**j. People displaced by the proposal**

Does not apply.

**k. Mitigation of displacement**

Does not apply.

- l. Consistency with plans and land use designations**  
Does not apply.
  
- 9. Housing**
  - a. Number of units and income level rating**  
Does not apply.
  
  - b. Residential units eliminated**  
Does not apply.
  
  - c. Housing mitigation**  
Does not apply.
  
- 10. Aesthetics**
  - a. Building height and exteriors**  
Does not apply.
  
  - b. Views**  
Does not apply.
  
  - c. Mitigation for aesthetics**  
Does not apply.
  
- 11. Light and Glare**
  - a. Types of light and glare**  
Does not apply.
  
  - b. Safety and views**  
Does not apply.
  
  - c. Off-site sources of light and glare**  
Does not apply.
  
  - d. Mitigation for light and glare**  
Does not apply.
  
- 12. Recreation**
  - a. Recreational opportunities**  
Does not apply.
  
  - b. Displaced recreational uses**  
Does not apply.
  
  - c. Recreational mitigation**  
Does not apply.

### **13. Historic and Cultural Preservation**

#### **a. Historic register**

Adoption of the 2010 Plan Update is not anticipated to affect any places or locations within King County designated on the Historic register.

#### **b. Cultural site**

Adoption of the 2010 Plan Update is not anticipated to affect any places or objects of archeological, scientific or cultural importance in King County.

#### **c. Mitigation for historic or cultural resource**

Does not apply.

### **14. Transportation**

#### **a. Public streets and highways**

Not applicable.

#### **b. Public transit**

Does not apply.

#### **c. Parking spaces**

Does not apply.

#### **d. New roads and street improvement**

Does not apply.

#### **e. Water, rail and air transportation.**

Does not apply.

#### **f. Trips per day.**

Does not apply.

#### **g. Transportation mitigation.**

Does not apply.

### **15. Public services**

#### **a. Public service demand.**

None. Adoption of the 2010 Plan Update is not anticipated to increase the need for public services.

#### **b. Mitigation (proposed measures to reduce or control direct impacts on public services)**

None (no negative impacts to Public Services anticipated).

**16. Utilities**

**a. Utilities**

Does not apply.

**b. Utility needs**

Does not apply.

**SECTION C: SIGNATURE**

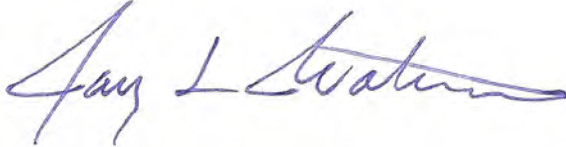
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Prepared by: Hilary Culverwell, Starrfish Consulting, LLC, under contract to the Local Hazardous Waste Management Program.

Date Submitted: March 26, 2010.

Reviewed by: Jay L. Watson, PhD, LHWMP Administrator

Signature:



**SECTION D: SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS**

- 1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

Adoption of the 2010 Plan Update is not anticipated to have any significant impact on discharge to air; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. Slight increases in vehicle emissions may result in the short-term from increased trips to collection sites resulting from expanded and more effective outreach about disposal of hazardous waste.

**Proposed measures to avoid or reduce such increases are:**

None.

- 2. How would the proposal be likely to affect plants, animals, fish, or marine life?**

Adoption of the 2010 Plan Update is not anticipated to negatively affect plants, animals, fish or marine life.

**Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

Does not apply.

**3. How would the proposal be likely to deplete energy or natural resources?**

Adoption of the 2010 Plan Update is not anticipated to deplete energy or natural resources.

**Proposed measures to protect or conserve energy and natural resources are:**

Does not apply.

**4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

Adoption of the 2010 Plan Update is not anticipated to negatively affect environmentally sensitive areas.

**Proposed measures to protect such resources or to avoid or reduce impacts are:**

Does not apply.

**5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

Adoption of the 2010 Plan Update is not anticipated to negatively affect land and shoreline use.

**Proposed measures to avoid or reduce shoreline and land use impacts are:**

Does not apply.

**6. How would the proposal be likely to increase demands on transportation or public services and utilities?**

Adoption of the 2010 Plan Update is not anticipated to increase demands on transportation or public services and utilities.

**Proposed measures to reduce or respond to such demand(s) are:**

Does not apply.

**7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

No conflicts are known. The 2010 Plan Update addresses moderate risk waste (household hazardous waste and hazardous wastes generated in small quantities by businesses, schools and institutions) as required by RCW 70.105.220.